

Glossary of Terms

Absorption: The process of distributing indirect or overhead costs over any defined cost base such as labor hours, labor dollars, material dollars, or total cost dollars so that at the end of an accounting period, the indirect costs will be absorbed totally.

Accelerated Recovery Method: An approach used to account for breaks in production that assumes that production initially will not follow the same cost improvement curve that was experienced in the first production run.

Acceptance Test: A test conducted by the customer or its authorized agency to determine if an item of material or service complies with the terms of the contract.

Acceptance: The act by an authorized customer representative of assent to ownership of existing and identified supplies, or the approval of specific services rendered as partial or complete performance of the contract.

Accounting Calendar: A calendar that sets forth a company fiscal year divided into 12 months, each of which contains either four or five weeks.

Accounting Document: Any form or original record that evidences a financial or property transaction, e.g., voucher, invoice, bill, contract, receipt, order, requisition, procurement directive, etc.

Accounting Period: A definite period of time (month, quarter, year) for which financial transactions are recorded. In government, may be fixed by legislative or other regulatory action. In business, the accounting year may be fixed to coincide with natural annual seasonal cycle of an enterprise. In any case, an arbitrary establishment that designates the date on which a set of accounting records will be closed. See shop calendar.

Accrued Expenditures: Represent charges incurred for goods and services received and other assets acquired, regardless of whether payment for the charges has been made.

Acquisition Cost: The sum total of all development and production cost for a program. Acquisition cost plus ownership cost equals total life cycle cost.

Acquisition Planning: The process by which all acquisition-related disciplines of an acquisition program are developed, coordinated, and integrated into a comprehensive plan for executing the program and meeting the stated requirements within the cost and schedule boundaries. Acquisition planning normally is associated with the initiation of the program at the beginning of solution implementation, but is also important at other times of the life cycle acquisition process.

Acquisition Program: A sponsored, fully funded effort initiated at the investment decision of the life cycle acquisition management process by the Joint Resources Council. An acquisition program is created in response to an approved Mission Need Statement. The goal of an acquisition program is to field a new capability that satisfies requirements, cost, schedule, and benefits stated in an Acquisition Program Baseline. Typically an acquisition program is a

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separate budgeted line item and may have multiple procurements and several projects, all managed within a single program.

Acquisition Program Baseline (APB): Establishes the performance, supportability and benefits requirements to be achieved by the acquisition program, as well as the cost and schedule boundaries within which the program is authorized to perform. The APB is a formal document approved by the Joint Resources Council at the investment decision, and in effect, is a contract between the user organization that requires the product of the program, and the provider of the product, the Integrated Product Team.

Acquisition Strategy: The overall concept and approach of an acquisition program for acquiring a capability to meet the requirements and perform within the boundaries set forth in the Acquisition Program Baseline. The strategy considers all aspects of a program such as acquisition approach, contracting, logistics, testing, systems engineering, risk management, program management, impact on facilities, human factors, schedules, and cost. The results are documented in the program's Acquisition Strategy Paper during the early stage of solution implementation.

Acquisition Strategy Paper (ASP): A required document that defines the overall approach by which an acquisition program will be executed during the solution implementation phase. It is a high-level, strategic overview of the technical, management, and procurement approach and is approved by the co-leaders of the appropriate Integrated Management Team. (IMT).

Acquisition Workforce: A wide array of disciplines from specialized areas brought together to have overall responsibility for the life cycle of the acquisition system. Skills include operational analysis, contracting, testing, logistics, cost estimating, budgeting, program planning, operational research, risk analysis, and also includes engineering and technical expertise in product lines.

Actual Cost of Work Performed (ACWP): The actual booked or accrued costs of a specific piece of work expressed in dollars.

Actual Cost: A cost sustained, in fact, on the basis of costs incurred as opposed to a standard, predetermined or estimated cost. Actual costs to date include cost of direct labor, direct material, and other direct charges, specifically identified to appropriate cost accounts as incurred, and overhead costs and general administrative expenses reasonably allocated to cost accounts.

Actual Values: Customer reported actual value at the contract level reconcilable to the company book of accounts.

Actuals: The labor hours, material costs, and other costs expended on a program unit or item through a specific period of time. Used interchangeably with actual costs.

Administrative Costs/Expense: Those costs that have to do with phases of operations not directly identifiable with the production, sale or financing of operations. They are costs incurred in connection with policy formation and the overall direction of a business. Salaries of major executives and general services such as accounting, contracting, industrial relations, etc. are included in this category.

Advance Payment: An advance of money made to a contractor prior to but in anticipation of performance under a contract or contracts. This money generally must be deposited in a special account and accounted for separately from other funds. It is to be distinguished from progress payments.

Advance Procurement: An exception to the full funding concept, advance procurement provides the means for funding long lead-time components in advance of the fiscal year in which the related end item is procured.

Advanced Buy: Procurement that provides for obtaining long lead-time components in advance of the fiscal year in which the related end item is to be procured. Advanced buy is an exception to the full funding policy.

Advanced Development: A part of research and development that normally involves hardware designed for test or experimentation, as distinguished from hardware designed and engineered for eventual service use. Subsystems and technology frequently are proved out in advanced development before they are accepted for incorporation in full-scale development. Advanced development effort typically is managed by a laboratory or research organization.

Affordability Assessment: The process of assessing the affordability of each candidate solution developed in the investment analysis phase against all existing programs in the agency's financial baseline for the same years. Standard criteria are used to determine the priority of the candidate program in relation to all others. If the amount of funding available for the years in question is insufficient, offsets from lower priority programs are identified. Affordability assessment also is performed when considering acquisition program baseline changes for existing programs that involve an increase in the cost baseline and the need to reallocate resources.

Agency: (1) Government - refers to a department, commission, board, or other independent office in the executive branch of the government. (2) Public - refers to any part of a Federal, state, or local government that is responsible for carrying out a public program.

Algorithm: A set of ordered procedures, steps, or rules usually applied to mathematical procedures and assumed to lead to the solution of a problem in a finite number of steps.

Allocation: (1) Financial - a method or combination of methods that will result in a reasonable distribution of indirect or overhead costs. In deciding upon appropriate allocation bases for overhead costs, tests of benefits received, equity, and logic are decisive factors. (2) Engineering - the methodical division of a requirement, such as volume, weight, reliability, or maintainability downward to constituent system, subsystems, etc., in such a manner that each is assigned a part of the requirement, which is appropriate to its hardware level and state-of-the-art. (3) Government - an official funding document that represents cash for commitment and obligation.

Allotment/Allotted Funds: (1) An authorization by the head or other authorized employee of a customer agency to incur obligations within a specified amount pursuant to an appropriation or other statutory provision. (2) The amount of funds the government makes available to cover billings from the contractor relative to a given contract.

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Allowable: That portion of costs, including overhead, recognized as reimbursable is called allowable for the purposes of costing government contracts.

Analogy Estimating (Comparative): An estimating method that uses actual costs of a similar existing or past program- and adjusts for complexity, technical, or physical differences to derive the new system estimate. Also referred to as analog and analogous cost estimates.

Analysis: A systematic approach to problem solving. Complex problems are simplified by separating them into more understandable elements.

Annual Appropriation: Also known as one-year appropriations. This appropriation generally is used for current administrative, maintenance, and operational programs, including the procurement of items classified as expense. These appropriations are available for obligation for one fiscal year.

Annual Funding: The current congressional practice of limiting authorizations and appropriations to one fiscal year at a time. The term should not be confused with two-year or three-year funds that permit the Executive Branch more than one year to obligate the funds.

Apportionment: A determination by the Office of Management and Budget as to the amount of obligations which may be incurred during a specified period under an appropriation, contract authorization, other statutory authorizations, or a combination thereof.

Appropriation: An annual authorization by an act of congress to incur obligations for specified purposes and to make payments out of the U.S. Treasury.

Assembly And Checkout: Those activities related to assembly, installation, integration, and testing occurring up to the time of turnover of an item to the customer.

Assembly: (1) A number of parts or subassemblies, or any combination thereof, joined together to perform a specific function. (2) Major section of an aircraft, missile, spacecraft, or other structure.

Assumption: A supposition on the current situation, or a presupposition on the future course of events, either or both assumed to be true in the absence of positive proof. In the absence of firm ground rules, assumptions are established to help define the conditions upon which an estimate will be premised.

Attrition: The reduction in a work force caused by loss of personnel and material - may be due to transfer, resignation, layoff, or retirement.

Attrition Rate: A factor, normally expressed as a percentage, reflecting the degree of losses of personnel or material due to various causes within a specified period of time.

Audit: The systematic examination of records and documents and the securing of other evidence by confirmation, physical inspection, or examination.

Audit Report: A report prepared as the result of an audit or examination of the accounts, records, estimate detail, or administrative operating policies, procedures and practices of a corporate entity, contractor, agency, or individual.

Authorization: An annual act of congress that authorizes a specific amount of funding for appropriation based upon a review of program and management considerations to proceed on a project. Must be accompanied by an appropriation to be viable.

Availability: A measure of the degree to which an item is in an operable and committable state at the start of a mission when the mission is called for at an unknown (random) time.

Average Lot Cost: The amount resulting from the division of the costs accumulated against a lot by the number of units in that lot.

Back Order: The quantity of an item requisitioned by ordering activities that is not available for issue immediately, but is recorded as a stock commitment for future issue.

Backlog: Generally, the value of unfilled orders at a particular point in time.

Balance to Complete Estimates: The labor, materials, and costs necessary to complete a program/project from a given point in time. Combined with actuals to derive the total cost.

Base Period: The period of time for which rates and factors were determined for projecting future estimates.

Base Year Costs/Dollars: Dollars that are expressed in the economic condition of a specific year and do not include escalation or inflation for future years. A base year dollar reflects the “purchasing power” of the dollar for the specified base year.

Base Year: Term used to define a year that is (1) the economic base for specific dollar amounts; (2) a fiscal year whose mid-point is selected as a reference point for computing an index; or (3) the starting point for the application of escalation factors.

Base: (1) An area or locality from which operations are projected or supported. (2) The denominator (direct labor hours/dollars, material dollars, units, weight, etc.) used in the development of a factor/rate.

Base/Basic Labor: A term referring to “hands on” or “doing” labor hours. These labor hours form the base for the application of factors for supporting labor functions.

Baseline Changes: Significant changes to, or breaches of, the baseline (cost, schedule, performance, and benefits) (program growth) that cause a need for a “mini” investment analysis and an investment decision by the JRC.

Basic Agreement (Or Basic Ordering Agreement): A written instrument between a procuring activity and a contractor that sets forth negotiated contract clauses that shall be applicable to the procurements entered into between the parties for a specified period of time.

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Benefit/Cost Analysis: An analytical approach to solving problems of choice. It requires (1) the definition of objectives; (2) identification of alternative ways of achieving each objective; and (3) the identification for each objective or alternative, which yields the required level of benefits at the lowest cost. It often is referred to as cost-effectiveness analysis when the benefits of the alternatives cannot be quantified in terms of dollars.

Best and Final Offer (BAFO): The final proposal submission after conclusion of negotiations in a source selection acquisition. At the request of the contracting officer, submittals are received from all offerors in the competitive range at a common cut-off date.

Best Time: The highest level of performance expected when the 100 percent efficiency conditions are limited. Best time normally is expressed in the same unit of measure as the standard.

Best-Fit-Line: A line which passes through a group of data point values in a manner which best represents the trend of the data points. The “least squares best fit method” is used frequently to compute this line-of-best-fit.

Bias: An effect that systematically distorts a statistical result. The distortion may be small enough to ignore or large enough to invalidate the results. It may be due to the sample design, the sampling process, or the estimating technique. Analysts try to use unbiased techniques.

Bid Bond: A guarantee furnished by a prospective contractor assuring that he will enter into a contract on which he has bid if it is awarded to him.

Bid Price: A price offered subject to immediate acceptance for a specific amount of goods and/or services.

Bid: Normally implies a response to a customer-initiated request for proposal or quotation that may be competitive or of a sole-source nature. In past years, a bid usually was simpler in documentation requirements than a proposal. However, in current usage the term bid often is used synonymously with a proposal.

Bidders' Conference: Also known as pre-proposal conference - a conference that may be held to brief prospective offerors after a solicitation has been issued, but before offers are submitted. Generally, the government uses these conferences in complex negotiated acquisitions to explain or clarify complicated specifications and requirements.

Bidding And Proposal Expense: That activity or offer directed toward the preparation and presentation of solicited or unsolicited proposals with the intent of obtaining a customer funded contract for a new or improved product or service, or to obtain contractual support for research and development effort.

Bill Of Material (BOM): A descriptive and quantitative listing of all the materials, supplies, parts and components required to produce a complete end item of material, assembly or subassembly, to overhaul or repair such an item, or to construct or repair a structure or facility item.

Black Box: (1) Electronic, electrical, or electromechanical assembly that is part of a system or subsystem. (2) A generic term for classified hardware.

Block Buy: Buying more than one year's requirements under a single year's contract. A total quantity is contracted for in the first contract year.

Boiler Plate: A popular/slang term used to describe (1) government pre-printed text for use in contracts or RFPs; (2) standard contract clauses as defined in government procurement regulations; (3) standard terms and conditions used in purchase orders; and (4) standard words used in proposals.

Bookkeeping: The recording of financial data for the purpose of accounting, usually under the system known as double-entry bookkeeping and under an accounting system designed by an accountant.

Brassboard Configuration: A pre-prototype working model used to demonstrate the operating functions of a design concept. Brass board hardware generally refers to electronic components and is not constrained to weight and volume parameters specified for the design of the final operational article.

Breadboard: A model constructed to demonstrate the workability or principle of design; a preliminary assembly used to prove the feasibility of a device, circuit, system, or principle with regard to the final configuration.

Breakdown (Price, Cost, Etc.): An orderly listing of the cost categories or elements that constitute the total.

Break-even Point: The unit at which the cumulative product sales equal or recover the cost of the investment required to produce the product.

Budget: (1) A statement, in financial terms, of projected or expected operations of an accounting entity for a given period. (2) The portion of the total cost allocated or assigned to a particular task or set of tasks.

Budget At Completion (BAC): The total of Budgeted Cost of Work Scheduled (BCWS) over the life of the program.

Budget Authorization: An administrative action, normally within the chain of command or management, approving an operating budget for use in execution of a program or programs.

Budget Cycle: (1) The period of time that elapses from the initiation of the budget process to the completion, thereof, for a particular fiscal year. (2) Government - the complete cycle that covers planning, programming, budgeting, enactment and execution phases.

Budget Estimate (or Budgetary Estimate): (1) Government - an estimated fund requirement for any element included in a budget. Collectively, all estimated fund requirements for a particular operating agency or component or consolidation thereof. (2) Contractor - the approximate cost of performing, or completing, the effort required in fulfillment of the contractor's understanding

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of the job to be performed. Contractor budgetary estimates are not binding contractually, usually have a higher allowance for risk, and are less accurate than contractual bids.

Budget Estimate Submission (BES): The formal submission of a program's financial requirements that becomes the basis for the President's Budget.

Budget Year: The fiscal year that is the subject of new budget estimates.

Budgeted Cost Of Work Performed (BCWP): Also known as earned value, it represents the portion of the work completed with the value in dollars based on the Budgeted Cost of Work Scheduled (BCWS).

Budgeted Cost Of Work Scheduled (BCWS): The amount of money put aside to do a specific piece of work over a stated period of time. It is specific in the sense that the work is described in some detail so there can be no confusion regarding the job that was planned. The schedule is to indicate when the work is to be accomplished. The work scope usually is small and the time period relatively short.

Budgeting: The process of translating approved or negotiated resource requirements (manpower and material) into time-phased financial targets or goals.

Budgeting To Most Likely Cost: The process of including within a budget the most likely or most probable estimate of the cost that ultimately will be realized for a program, project, or task.

Built In Test Equipment (BITE): Test equipment manufactured and assembled as an integral part of the end item or system.

Bulk Material: Material stored and issued by volume, footage, weight, or liquid measurement such as petroleum, bar stock, and lumber.

Calendar Year: The period of time from January 1 through December 31, distinguished from fiscal year.

Calibration: In terms of cost models, a technique used to allow application of a general model to a specific subset of its database. It involves the computation of an adjustment factor to compensate for variations between historical cost and predicted cost.

Call Contract: A contractual arrangement wherein services or personnel are provided on an open contract at the discretion and option of the buyer. Terms and conditions of the contract, which include pricing and scheduling, are predetermined or the methodology for determining them is established. Usually used on spare orders.

Cancellation Ceiling: The maximum amount that the FAA will pay the contractor which the contractor would have recovered as a part of the unit price, had the contract been completed. The amount that actually is paid to the contractor upon settlement for costs not recovered (which can only be equal to or less than the ceiling) is referred to as the cancellation charge. This ceiling generally includes only nonrecurring costs.

Cancellation: The cancellation of the total requirements of all remaining program years of a multi-year contract. Cancellation results when the CO notifies the contractor of non-availability of funds for contract performance for any subsequent program year, or fails to notify the contractor that funds are available for performance of the succeeding program year requirement.

Cannibalize: The art of removing serviceable parts from one item of equipment to install them on another item of equipment to restore the latter to a serviceable condition.

Capital Investment Plan (CIP) Cycle: A five-year capital investment planning period.

Catalog Estimating: An approach, also known as handbook estimating, using handbooks, catalogs, and other reference books that are published with price lists for standard, off-the-shelf items.

Ceiling: The maximum amount on an incentive type contract that usually is expressed as a percentage of the contract target cost.

Certified Tool List: A list of the special tools produced by a supplier. This list is prepared and submitted by the supplier as evidence of completion of tool fabrication or rework. Also, it confirms review and approval of the tools.

Change Of Scope: A customer-directed change pertaining to deliverable items or contract tasks.

Change Order: A written order, signed by the contracting officer, directing the contractor to make changes under a clause of a contract.

Charge Number: The sequence or series of digital and/or alphabetical code numbers designed for controlling and sorting accounting information for cost accumulation, reporting, and management use. The charge number also provides cost information in relation to contract work breakdown structure and organization identity.

Claim: A claim is a written demand or assertion by one of the contracting parties seeking, as a matter of right, payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to the contract. A claim arising under a contract, unlike a claim relating to that contract, can be resolved under a contract clause that provides for the relief sought by the claimant. However, a voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim. The submission may be converted to a claim, by written notice to the CO, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

Clarification Request (CR): Used in source selection, a request formally communicated to an offeror to ask for further clarification of information provided in the offeror's proposal.

Closure: (1) Close out of contract on which performance has been completed or deactivation of an installation or facility. (2) The process of finalizing negotiations.

Coefficient of correlation (R): See correlation coefficient.

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Coefficient of determination (R^2): A measure used in regression analysis. Values range from -1 to +1 and are calculated by dividing the variation in Y explained by the regression equation by the total variation in Y. The closer r^2 is to +1 or -1, the greater the variation is explained by the relationship between the dependent and independent variables.

Commercial Item: An item or service that has been sold at established catalog or market prices.

Commercial-off-the-shelf: An item or service that has been developed for sale, lease or license to the general public. The item or service currently is available at a fair market value. This is distinct from a commercial item in that it may not have already been sold at established catalog or market prices.

Commitment: (1) An offer or proposal to a customer or a supplier, or acceptance of an offer from the customer, leading to the execution of a contractual instrument or purchase order. (2) A firm administrative reservation of funds, based upon firm procurement directives, orders, requisitions, or requests which authorize the creation of an obligation without further recourse to the official responsible for certifying the availability of funds. (3) A term used in business, where it means a contract or other legal obligation for goods or services to be furnished.

Common Item: (1) An item of material required for use by more than one activity. (2) Sometimes loosely used to denote a consumable item except repair parts or other technical items. (3) Readily available commercial items. (4) Items used by two or more government agencies of similar manufacture or fabrication that may vary between the services as to color or shape (as vehicles or clothing). (5) Any part or component, which is required in the assembly of two or more complete end items.

Common Support Equipment (CSE): Ground support equipment in general use required to support and maintain a particular type or category of equipment or other hardware.

Commonality: The use of identical parts, components, subsystems, or systems to achieve economies in development and manufacture.

Communications: Any oral or written communication between the FAA and an offeror that involves information essential for understanding and evaluating an offeror's submittal, and/or determining the acceptability of an offeror's submittal.

Comparative Cost Estimating: Comparing the job to be done (or portions of it) to all or parts of a previously completed job for which valid and comparable cost and technical information is available. This method of cost estimating can be applied to any level of work, detailed or summary, for estimating the cost-producing elements, or the cost itself. Generally, a proficient cost estimator cannot help but use this method to some extent, consciously or unconsciously, because his experience and natural thought processes force this measurement or appraisal. In comparative cost estimating, complexity factors or ratios may be used and applied to the known costs or cost elements to create the estimates - if enough information is available on the completed program to make a valid comparison of the new with the old program. Other terms, given this kind of estimating, are specific analogy, cost history, estimating by comparison,

comparative analysis, key factor estimating, and delta from a previous estimate. See analogy estimating.

Comparative Studies: Studies conducted for the purpose of comparing candidate solutions to a problem normally involving technical, performance, and cost comparisons.

Competition: An environment of varying dimensions relating to buy-sell relationships, which the buyer induces, stimulates or relies on conditions in the marketplace, that cause independent sellers to contend for the award of a contract and/or the sale of the product.

Competitive Negotiation: A negotiated procurement that is initiated by a request for proposals, which sets out the customer (or buyers) requirements and the criteria for evaluation of offers. It contemplates the submission of timely proposals by the maximum number of possible offerors; usually provides discussion with those offerors found to be within the competitive range. Competitive negotiation concludes with the award of a contract to the one offeror whose offer, price and other factors considered, is most advantageous to the customer (or the buyer).

Competitive Range: A technique used in the source selection process to eliminate certain contractors who do not meet minimum requirements. The customer on the basis of technical, management, price considerations, and other salient factors determines the competitive range. Unless exempted by circumstances prescribed by departmental or agency regulations, the contracting officer must conduct written or oral discussions with all responsible offerors who submit proposals within the competitive range.

Completeness: A source selection criteria used to evaluate the responsiveness of the offeror in providing all RFP requirements, SOW items, and traceability of estimates.

Complexity Factor: A judgment or experience factor to evaluate the degree of unknowns, difficulty of design or manufacturing anticipated with a new end item as compared to a similar item.

Component: An article, which is normally a combination of detailed parts, subassemblies, and assemblies, is a self-contained element of a complete operating equipment end item, and performs a function necessary to the operation of that equipment. It is normally a WBS element of the second lower level below a subsystem (that is, below an equipment item).

Composite Cost Per Hour Rate: The total estimated direct hours divided into the total estimated dollars.

Composite Curve: A cost improvement curve calculated from end-item level data that incorporates the influence of all functional cost categories.

Composite Index: An index that measures relative change from the base period for a group of closely related items.

Composite Labor Rate: The weighted average labor rate by skill mix, percentage of effort or time phasing of any group, organization, or project.

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Composite Rate: A labor, overhead or other rate that has been weighted to account for a mix of different elements.

Concurrency: The schedule overlap between the development and production efforts of a program.

Concurrent Spares: Those spare parts that can be released and produced simultaneously with end times of the same or substantially the same configuration or model.

Condemnation Spare: A spare obtained to replace an item that is rendered inoperable as a result of the prime equipment operation.

Confidence Level: The degree of probability that actual cost will fall within an expressed interval, e.g., + or -5 percent of the estimated cost.

Configuration: The complete technical description required to fabricate, test, accept, operate, maintain, and support systems/equipment logistically.

Configuration Item (CI): An aggregation of hardware or computer programs or any of their discrete portions which satisfies an end use function and is designated by the government for configuration management. CIs may vary widely in complexity, size and type, from an electronic system to a test meter.

Consideration: (1) That which accrues to a company in return for a benefit passing from the company to another organization or individual outside of the company. It may take the form of money, material, a legal right, goodwill, or other compensation. (2) A negotiation term used to denote that the points and arguments have been included in an offer.

Constant Year Dollars: A phrase reflecting the dollar purchasing power for a specified year. An estimate is in constant dollars when prior year costs are adjusted to reflect the level of prices of the base year, and future costs are estimated without inflation. A statistical series is expressed in constant dollars when the effect of changes in the purchasing power of the dollar has been removed.

Constraints: Limitations of any kind to be considered in planning, programming, scheduling, implementing, or evaluating programs or systems.

Constructive Change: During contract performance, an oral or written act or admission by the contracting officer or other authorized customer official, which is of such a nature that it is construed to have the same effect as a written change order.

Consumable Material: Material, which after issue from stock is consumed in use or which, while having continuing life, becomes incorporated in other property, thus losing its identity.

Consumption Rate: The actual or estimated quantity of an item consumed or expended during a given time interval, expressed in quantities by the most appropriate unit of measurement.

Consumption-Type Items: Those items which are either consumed in use or which lose their original identity during periods of use by incorporation into or attachment upon another assembly.

Contingency: An allowance or amount added to an estimate to cover a possible future event or condition arising from presently known or unknown causes, the cost outcome of which is indeterminable at a present time.

Contingency Analysis: Repetition of an analysis with different qualitative assumptions - e.g. how well will equipment perform on different terrain/type of conflict, etc.

Contract (Program) Close Out: The costs associated with the orderly close out of a contract. Includes costs for disposition, scrap, facilities deactivation, etc.

Contract Administrator: The individual duly authorized by the appropriate authority in the department or contractor to administer the contract or a professional employee of a company whose function is the administration of contracts.

Contract Amendments: A contract modification that is accomplished by the mutual action of the parties. See supplemental agreement.

Contract Authorization: A statutory authorization under which contracts or other obligations may be entered into prior to an appropriation for the payment of such obligations.

Contract Bond: A guarantee, backed by cash or other security, of the faithful performance and fulfillment of all the undertakings, covenants, terms, conditions, and agreements contained in a contract. It may include a guarantee of the payment of all labor and material bills incident thereto. These two guarantees may be written separately; the first as a performance bond; the second as a payment bond.

Contract Ceiling: A value established in the contract beyond which the government has no obligation to pay.

Contract Change Notification (CCN): A formal authorization by the contracting officer for a change or variance to an existing contract.

Contract Change Proposal (CCP): A change proposal which may use or have an effect upon end items of operationally configured equipment, but which does not affect the physical, function, performance, maintenance or logistics characteristics of the system, as contracted for acceptance and delivery on an end item or system basis. Examples are changes to program schedule or redirection, data, drawings, documentation, exhibits, etc., which by their nature are not subject to engineering change proposal action.

Contract Data Requirements List (CDRL): A customer listing used to identify and establish the data and documentation required by a contract. Such a list is made a part of the contract.

Contract End Item (CEI): A deliverable equipment or facility that is accepted formally by the procuring agency, in accordance with requirements in a CEI detail specification.

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Contract Line Item Number (CLIN): A contract instrument used to administer and control contracts; authorize time limit or content limit portions of a contract; administer funds and appropriations on a contract; procure options for additional quantities or services; and pay contractors for work performed in a contract. Contract line items usually have a numerical designator (i.e., 0001, 0002, 0003, etc.) with sub line items being identified by numerical/alpha designators (0001AA, AB, AC, etc.).

Contract Modification: Any written alteration in the specification, delivery point, rate of delivery, contract period, price, quantity, or other contract provisions of an existing contract, whether accomplished by unilateral action in accordance with a contract provision, or by mutual action of the parties to the contract. It includes bilateral actions such as supplemental agreements and amendments, and unilateral actions such as change orders, notices of termination, notices of the exercise of a contract option, and change in payment office or administrative responsibility.

Contract Pricing Proposal: The instrument required of an offeror for the submission or identification of cost or pricing data.

Contract Profit: Covers both profit and fee, target profit, or profit as stated in a fixed price type of contract (FFP, FPI). In a cost form of contract (CPFF, CPIF), it is called fee.

Contract Settlement: An adjustment of a contract termination claim, either by mutual agreement or by unilateral action by the contracting agency pursuant to regulations and contract terms. In its broadest sense a settlement of a contractual dispute.

Contract Technical Services (CTS): Services contracted for by the customer with a manufacturer or commercial concern for the purpose of indoctrinating personnel in new and complex equipment introduced into the inventory; or for advising and instructing personnel in techniques used to install, engineer, maintain, supply, and operate systems and complex equipment when skills within the customer organization or agency are inadequate or not completely operational.

Contract Termination: The cancellation, in whole or in part, of work under a prime contract or a subcontract, thereunder, for the convenience of, or at the option of, the Government. See termination.

Contract Type: Refers to a specific pricing arrangement employed for the performance of work under contract. Specific pricing (or compensation) arrangements, expressed as contract types, including Firm Fixed-Price (FFP), Fixed-Price Incentive (FPI), Cost-Plus-Fixed-Fee (CPFF), Cost-Plus-Incentive-Fee (CPIF), and several others. Among special arrangements that use fixed-price or cost-reimbursement pricing provisions are contract types called indefinite delivery contracts, basic ordering agreements, letter contracts and others.

Contract Underrun/Overrun: The amount by which the estimated final cost is less than/or exceeds the contract target cost.

Contract Work Breakdown Structure (CWBS): The work breakdown structure that addresses only those WBS elements applicable to a specific contract.

Contract: (1) An agreement, enforceable by law, between two or more competent parties, to do or not to do something not prohibited by law, for a legal consideration. (2) Any type of agreement or order for the procurement of supplies and services. It includes unqualified notices of award; contracts of a fixed price, cost, cost-plus-a-fixed fee, or incentive-type contracts. Also may provide for the issuance of job orders, task orders or task letters thereunder; letter contracts and purchase orders. It also includes amendments, modifications, and supplemental agreements to the basic contract.

Contracting Officer: Any officer or civilian employee of a government department or agency who, in accordance with procedures prescribed by each respective department, has been or shall be designated a contracting officer with the authority to enter into and administer contracts and make determinations and findings with respect thereto, or any part of such authority. Sometimes referred to as Procurement Contracting Officer.

Contractor Cost Data Reporting (CCDR): A reporting structure used in pop procurements consisting of specific definitions, requirements, and formats.

Contractor Furnished Property (CFP): Property, other than government furnished and contractor owned property (i.e., acquired by the contractor at the contractor's expense), used by the contractor in the performance of a contract. The contractor at the government's expense acquires CFP.

Contractor: Term used in procurement to denote the party performing the task, service or providing the equipment, hardware, facility, or end item called out in a contract.

Contractor Support: An arrangement whereby a contractor furnishes required material and maintenance of an end item or system pending assumption of supply support by the FAA. Often called interim contractor support (ICS) or contractor maintenance support (CMS). This arrangement covers a specific time or period of years.

Contractual Instrument: A written contract or modifications to the contract. By common usage a portion of a contract as a contract line item, provision, or attachment.

Controlled Item: Any item of material over which proper authority exercises close supervision of distribution, issue, and use because it is scarce, costly, or of highly technical, classified, or hazardous nature.

Coordinates: The two elements of reference of any point on a grid chart. One element, the abscissa (or X), is measured by horizontal distance from a vertical perpendicular axis. The other element, the ordinate (or Y), is measured by vertical distance from a horizontal base line. Abscissas to the right of the vertical axis are positive - to the left, negative. Ordinates above the horizontal base line are positive - below, negative. The point of intersection of the axis, called the point of origin, has the value zero for both abscissa and ordinate. Generally, curves relating to estimating and economic statistics are confined to one quadrant with both abscissas and ordinates positive.

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Correlation: Statistical technique used to determine the degree to which variables are related or associated. It does not prove or disprove a causal relationship.

Correlation Coefficient: A mathematical measure of the degree of association between two variables in a series of observations (on the assumption that the relationship between the two variables is a straight line). Its value must lie between +1 and -1, either extreme denoting complete dependence of one variable on the other, and 0 denoting no association. A plus sign shows that an upward movement of one is accompanied by an upward movement of the other; and a minus sign shows that an upward movement of one is accompanied by a downward movement of the other. Normally expressed as “r.” See coefficient of correlation.

Cost: The amount paid or payable for the acquisition of materials, property, or services. In contract and proposal usage denotes dollars and amounts exclusive of fee or profit (i.e., cost does not include profit or fee). Although dollars are normally used as the unit of measure, the broad definition of cost equates to economic resources; i.e., manpower, equipment, real facilities, supplies, and all other resources necessary for project, program, or agency support systems and activities.

Cost Account: The lowest level of a work breakdown structure in which work is described and budgeted. Costs are accumulated at this level, normally by functional category.

Cost Accounting: That branch of accounting dealing with the classification, recording, allocation, summarization, and reporting of current and prospective costs. Included in the field of cost accounting are the design and operation of cost systems and procedures; and the determination of costs by department, function, responsibility, activity, product, territory, periods, and other units. Also included are the comparison of costs of different periods of actual with estimated or standard costs and of alternative costs, and the presentation and interpretation of cost data as an aid to management in controlling current and future operations.

Cost Accounting Standards (CAS): Cost accounting principles (standards) established by the Cost Accounting Standard Board for the purpose of achieving uniformity and consistency in the treatment of costs by government contractors and subcontractors.

Cost Accounting System: An accounting system designed to record costs by contract, project, production lot for hardware, or other cost objectives through assignment of specific work order or cost accounts for costs applicable to the cost objective.

Cost Allocation: A method, usually mathematical, of assigning direct or indirect cost equitably to one or each of several of the objectives for which the cost was incurred jointly.

Cost and/or Pricing Data: All facts that, at the time of the price agreement, the seller and buyer reasonably would expect to affect price negotiations. Cost and/or pricing are data requiring certification. Cost or pricing data are factual, not judgmental data, and therefore are verifiable. While these data do not indicate the accuracy of the prospective contractor's judgment about estimated future costs or projections, they do include the data used to form the basis for that judgment. Cost or pricing data are more than historical accounting data; they are all the facts

that reasonably can be expected to contribute to the soundness of estimates of future costs and to the validity of determinations of costs already incurred.

Cost Center: An administrative unit selected for the purpose of controlling costs. The unit has managerial responsibility, usually consists of a related grouping of methods and facilities and is made up of elements having common cost characteristics. Also, it is the basic unit of control in cost accounting. Often referred to as responsibility center.

Cost Contract: (1) A contract, which provides for payment to the contractor of allowable costs, to the extent prescribed in the contract, incurred in performance of the contract. (2) A cost-reimbursement type contract under which the contractor receives no fee.

Cost Control: Application of procedures resulting in early illumination of potential changes in resource requirements and allowing timely surveillance of the usage of funds. This permits action that will keep costs within a predetermined range.

Cost Data: The term given to cost statistics or records of a program that usually have not been analyzed and organized into cost information.

Cost Driver: The characteristics of a system or end item that have a large or major effect on the systems cost.

Cost Effectiveness: The measure of the benefits to be derived from a system with cost as the primary or one of the primary measures.

Cost Estimating: The process of predicting the future cost of something based on information known today. It includes selecting estimating structures, collecting, evaluating and applying data, choosing and applying estimating methods, and providing full documentation.

Cost Estimating Relationships (CER): A mathematical expression relating cost as the dependent variable to one or more independent cost driving variables. The relationship may be cost-to-cost such as using manufacturing hours to estimate quality assurance hours or using manufacturing hours to estimate dollars for expendable material such as rivets, primer, or sealant. The relationship may also be cost-to-non-cost such as estimating manufacturing hours by the use of weight or using the number of engineering drawings to estimate engineering hours. Both weight and engineering drawings are non-cost variables. (NOTE: It generally is accepted that pricing factors, estimating factors, ratios, parametrics, etc. are cost estimating relationships and should be referred to as such).

Cost Estimating Uncertainty: Variations in cost estimates when the configuration of an item remains constant.

Cost Factor: Cost estimating relationship (CER) in which the cost is directly proportional to a single independent variable. A brief arithmetic expression wherein cost is determined by application of a factor such as a percent, e.g., initial spares percent, general and administrative percentage, or a ratio as in pay and allowance cost per man per year.

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Cost Growth: Term related to the net change of an estimated or actual amount over a base cost figure established previously.

Cost Improvement Curve Theory: Theory stating that as the quantity of items produced doubles, the costs decrease at a constant rate. Unit cost improvement curve theory describes the relationship between the costs of individual units. Cumulative average theory describes the relationship between the average costs of different quantities of units.

Cost Incurred: A cost identified through the use of the accrued method of accounting and reporting or otherwise actually paid (e.g., cost of direct labor, direct materials, and direct services identified with and necessary for the performance of a contract and all properly allocated and allowable indirect costs as shown by the books of the contractor).

Cost Input: A portion of an estimate received from a supporting functional organization or division.

Cost Model: An estimating tool consisting of one or more cost estimating relationships, estimating methodologies, or estimating techniques used to predict the cost of a system or one of its lower level elements.

Cost Of Money: The cost of capital committed to facilities as an element of contract cost.

Cost Proposal: A submission by a potential contractor, for the purpose of planning or to be used for definitive negotiation, indicating the cost to the procuring agency or buyer for his conduct of a specified extent of work. The proposal, in supporting the proposed cost, includes an amount of detail commensurate with the purpose, coverage, and other characteristics of the proposal. The proposal may or may not be in response to a request for proposal.

Cost Reimbursement: Refers to a family of pricing arrangements that provide for payment of allowable, allocable and reasonable costs incurred in the performance of a contract, to the extent that such costs are prescribed or permitted by the contract.

Cost Reimbursement Contracts: Types of contracts that provide for payment to the contractor of allowable costs incurred in the performance of the contract, to the extent prescribed in the contract.

Cost Risk: An assumption of possible monetary loss in light of the complexity or unknown nature of the job or work to be done. One of the elements to be considered in the negotiation of a fair and reasonable price, as well as in determining the type of contract under which performance would occur. See risk.

Cost Schedule Control System Criteria (C/SCSC): A series of vigorous statements used to determine the quality of a contractor's management information system. C/SCSC is neither a system nor a report.

Cost Sensitivity: Exists when the amount of costs vary greatly with small variation or change in program or end item characteristics.

Cost Sharing: An arrangement under which the two parties share the costs for a program concerned (government/contractor or contractor/subcontractor).

Cost Track (Tracking): (1) A step by step record of the revisions and updates of proposed costs from the original submittal of a baseline estimate to the final agreement on costs. (2) A historical record of selected cost information (estimated or actual) on a system basis with written analysis, which explains variance among cost entries. (3) The flow of cost data from the price summary to detail support data. (4) Establishing and maintaining permanent records of successive cost estimates made for major programs and systems together with the reasons for changes to those tracking cost estimates.

Cost Type Contract: A contract that provides for payment to the contractor of allowable costs in the performance of the contract, to the extent prescribed in the contract.

Cost Underrun/Overrun: A net change due to the contractor's actual costs being under/over target or anticipated contract costs.

Cost Variance (CV): The difference between what was spent and the amount of budgeted work completed. It is expressed as Budgeted Cost of Work Performed (BCWP) - Actual Cost of Work Performed (ACWP).

Cost/Effectiveness Analysis: A method for examining alternative means of accomplishing a desired objective/mission for the purpose of selecting programs, which will provide the greatest effectiveness for the cost. See benefit cost analysis.

Criteria: The standards against which evaluations are performed. Measures used should capture or embrace as closely as possible the purposes sought. May consist of proxy measures for dimensions difficult to measure.

Critical Activities: Those program management, material, engineering, test, manufacturing and quality assurance activities that experience has shown must be subject to formal procedures and discipline to assure that programs and products will be successful and profitable.

Critical Design Review (CDR): Final program technical and configuration review prior to production authorization. Usually signifies a 90 percent drawing release.

Critical Item: Includes items (1) where failure affects safety; (2) where failure will prevent mission accomplishment; (3) which require special handling; (4) which have long lead time, are in short supply, or are expected to be in short supply for an extended period; (5) which are expensive; or (6) which impose high maintenance loads. Special criteria must be established for identification, control, and special handling of critical parts, units, subsystems, or other items from design through final acceptance.

Critical Material: Those supplies and equipment vital to the support of operations, which owing to various causes are (1) not available in sufficient quantity to meet existing requirements; and (2) not anticipated to be available in sufficient quantity to meet future or planned requirements.

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Critical Path: The path or a network of a schedule on which the slippage of any event will reflect an equal slippage in the end objective.

Crosscheck Method: An estimating methodology that is different from the estimating approach selected as the primary method. It typically is applied to those cost elements that contribute heavily to the total estimate to ensure that the primary method employed has generated credible results.

Cumulative Average Cost: The cost per unit in hours or money that results when the summation of the costs for the units produced is divided by the units produced.

Cumulative Average Curve: Logarithmic chart of cumulative average values plotted at the last unit of each cumulative quantity.

Current Year Dollars: Dollars that reflect purchasing power current to the year the work is performed. Prior costs stated in current dollars are the actual amounts paid out in these years. Future costs stated in current dollars are the projected actual amounts that will be paid. Also sometimes referred to as actual dollars, then year dollars, inflated, or escalated dollars. See then year dollars.

Cycle: One of the intervals or spaces in time during which one course or round of events of a certain regularly and continually recurring succession of events is completed.

Damages: The amount for which the company will be held liable for contract breaches and acts by employees within the scope of employment.

Data: All graphic and written information, whether technical or non-technical. Data may be in the form of drawings, documents, reports, letters, machine printouts, brochures, and other applicable forms not specifically mentioned. Usually controlled by the Contract Data Requirements List (CDRL) attached to a contract.

Data Item Description (DID): Detailed description of the content of Contract Data Requirements List (CDRL) items including preparation information, reproduction media, delivery requirements, etc.

Data Line Item: One item of data as listed on a data requirements package or CDRL.

Data Management: The element of program management which identifies, plans, directs, and controls data tasks to ensure that total contract data requirements and program data requirements are satisfied.

Data Package: A set of documents furnished by the contractor to the customer upon completion of a statement of work, contract task, or upon delivery of equipment.

Data Reduction: Conversion of a large quantity of detailed data into a small quantity of useful summarized information.

De-Mod: Restoration to the original configuration at the conclusion of a contract or program.

Declared Over/Underrun: The amount of contract cost overrun or underrun that has been reported to the customer.

Defect: A non-conformance to specification/drawing that has not resulted in a failure. A defect might range from an incorrect paint job to a serious flaw. A defect might result in failure eventually, but has not yet done so.

Defect In Material Or Workmanship: (1) Patent Defect - Refers to a special condition or conditions in a product due to faulty workmanship and/or material which might cause its failure or malfunction, and which was or should have been discovered upon inspection. (2) Latent Defect - A defect not discoverable upon inspection, such as a crack in a forging or structural part.

Deficiency: Any condition or characteristic in any supplies or services that is not in compliance with the requirements of the contract at the time of delivery.

Deficiency Report (DR): Used in source selection, a report formally communicated to an offeror to document deficiencies in the offeror's proposal. The DR provides the offeror the opportunity to rectify the deficiency by submitting a proposal modification.

Deflators: A numerical index used to reduce a price level to that comparable with price level at a given different time.

Deliverable Item: Hardware, services, software or other items deliverable to the customer in accordance with the terms of a contract.

Demand: As used in a mission needs analysis, is the projected demand for FAA products, service, and capacity.

Demonstration And Validation Phase: The phase in which the alternatives selected under the conceptual exploration phase are further investigated and definitized. These investigations may involve paper studies or hardware prototypes-or both. The objective of these efforts is an in-depth understanding of the technical and affordability aspects of competing alternatives that will assist in selecting the most viable system for further development.

De-obligation: Downward adjustment of obligations recorded previously. Attributable to contract terminations, price revisions, cost under runs on cost reimbursement contracts and corrections of amounts originally recorded as obligations, or for convenience of the Government.

Deployment Plan: A plan that identifies the bases that will receive operational inventory, the quantity required at each base and the support requirements (e.g., training, data, support equipment) at each base.

Depot Maintenance: The highest level of maintenance that is the responsibility of the logistics agency. This maintenance is performed at organic or contractor facilities and is the "overhaul" level.

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Depot: A facility for the receipt, classification, storage, issue, repair maintenance, manufacture, assembly, or salvage of material contract end items, and systems and hardware.

Design: The engineering disciplines and analysis required to transform a concept into released drawings, engineering data, and final hardware.

Design To Cost (DTC): A concept that establishes cost elements as management goals to best balance between life cycle cost, acceptable performance, and schedule. Under this concept, cost is a design constraint during the design, development, and production phases, and a management discipline throughout the system life cycle.

Design To Cost Goal: A unit cost goal to be achieved in the production phase of the life cycle based upon the existing best estimate of quantity, production rate, time frame, and, when available, cost-quantity relationships (learning curves). The DTC goal is expressed in constant dollars and is established not later than entry into full-scale development. Design and production studies are conducted to achieve the goals.

Design To Unit Production Cost (DTUPC): Included in development contracts as the anticipated unit production price to be paid by the Government for recurring production costs and is based upon a stated production quantity, rate, and time frame. The contractor uses this unit cost goal as a design parameter to control system cost. In general, the DTUPC goals should include only those cost elements that are under the control or influenced by the contractor.

Deterministic Relationship: In statistics, a relationship between two or more variables that is certain in nature.

Development: (1) The systematic use of scientific and technical knowledge intended to meet specific product performance requirements or objectives. (2) The design, development, test, and evaluation of a potential new product or service or of an improvement in an existing product.

Development Cost: All costs (government and contractual) required to develop a system before committing it to production.

Developmental Manufacturing: Manufacturing effort to build mockups, breadboards, or help build hardware for use in engineering development, test, and evaluation activities. Also called, developmental support, factory support to engineering, experimental fabrication, manufacturing support to engineering, etc.

Direct Costs: Any item of cost (or the aggregate thereof), which may be identified specifically with any objective, such as a product, service, program, function, or project. These costs may be charged directly to a given contract charge number or they may be charged to a redistribution work order subsequently distributed to contracts over a logical base. Direct costs are the opposite of indirect costs, which are classified as overhead and are distributed to contracts over a base normally composed of direct hours or dollars. See indirect cost.

Direct Estimating: Also known as specialist estimating, an estimating approach that is a judgmental estimate performed by an expert in the area to be estimated.

Direct Labor: That labor that can be specifically and consistently identified or assigned to a particular work order and that bears full overhead.

Direct Material: Includes raw materials, standard, commercial items, purchased parts, purchased equipment, outside production, and subcontracted items required to manufacture and assemble completed products. Also direct material often includes the costs associated with materials or products received from other company divisions under an interdivisional support agreement.

Disclosure Statement (Cost Accounting Standards): Designed to meet the requirements of Public Law 91-379 (Form CASB-DS-1). Persons or firms required to complete and submit the statement describe their contract cost accounting practices by providing data that are responsive to its requirements.

Discount Rate: The interest rate used to discount future costs and benefits to arrive at their present values when one considers the time value of money.

Discounting: A technique for converting forecasted amounts to economically comparable amounts at a common point in time that considers the time value of money. The time value of money is considered by computing present value costs. Present value costs are computed by applying a discount rate to each year's cost in a cost stream. Discount rates usually are developed to approximate closely the current cost of money in the financial marketplace. The purpose of discounting is to determine if the time value of money is sufficiently great to change the ranking of alternatives--a ranking that has been established on the basis of all other considerations.

Discriminating Criteria/Key Discriminators: Those factors expected to be especially important, significant, and critical in the ultimate selection decision.

Disjoint Theory: A part of cost improvement curve theory that contends that the cost improvement rate (slope) in production will be the same as in development but improvement starts over at unit one and at a value less than the first prototype unit.

Distributed/Distributable Labor (Costs): Any costs or labor, which cannot economically be accounted for to a specific task and thus are distributed across all contract tasks as a function of labor or material costs. May also cover costs such as distributed data processing or material costs.

Documentation: The summary and backup data that supports a cost estimate. Cost documentation must support the credibility of the estimate, provide a history of why program cost changed, and provide a database for future estimates. Cost documentation in AFSC is referred to as a "blue book."

Earned Value: See Budgeted Cost of Work Performed (BCWP).

Economic Analysis: A systematic approach to a given problem, designed to assist the manager in solving a problem of choice. The full problem is investigated; objectives and alternatives are

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searched out and compared in the light of their benefits and costs through the use of an appropriate analytical framework. Often used to determine the best use of scarce resources.

Economic Life: The period of time over which the benefits gained from a system may reasonably be expected to accrue to the owner. In economic analysis this is the minimum of its physical, technological, or political life.

Economic Lot Size: Size of the batch, which minimizes average unit cost.

Economic Price Adjustment (EPA): A contractual alteration permitted and specified by contract provisions for the upward and/or downward revision of a stated contract price based upon actual experience (future years) as compared to forecasts of selected economic indices at the time the contract was negotiated.

Economic-Order-Quantity (EOQ): That quantity derived from a mathematical technique used to determine the optimum (lowest) total variable costs required to order and hold inventory.

Economic-Order-Quantity Principle: A supply technique used to compute replenishment order quantities of consumable material whereby the cost to order is equated against the cost of carrying the inventory to achieve the most economical procurement, storage and inventory practices. An optimum method for computing operating levels of supply after considering the cost elements involved.

Efficiency: The mathematical reciprocal of a realization factor. A ratio of the standard hour value to the actual hours used. It is expressed as a percent derived by dividing the standard hours by the actual hours. See realization.

Electronic Data Processing (EDP): A general, categorical designation normally used when referring to the entire field of electronic data processing machines, equipment, and software.

End Item: The term used to represent the hardware, software, facilities, or services that are deliverable or supplied to a customer on a contract. It also is defined as a final combination of end products, component parts, and/or material that is ready for its intended use.

Engineering: The effort and costs expended in the scientific exploration, study, analysis, design, development, evaluation, and redesign of a specific task or work breakdown structure element. It includes the preparation of specifications, drawings, parts lists, wiring diagrams, technical coordination between engineering and manufacturing, supplier coordination, test planning and scheduling, analysis of test results, data reduction and report preparation. Also includes the determination and specification of requirements for reliability, maintainability, and quality control. It is a basic functional cost category or cost element.

Engineering Change Orders (ECO) Estimate: The reserve in an estimate for known and unknown contract changes that is over and above allowances for risk.

Engineering Change Proposal (ECP): A proposed change to contract specifications. It applies to changes that affect the physical functional, performance, maintenance, or logistics characteristics of a system as contracted for by the customer.

Engineering Estimate (or detailed engineering estimate): (1) Prepared by contractors - an estimate developed by requesting and collecting estimates from functional organizations within a company or agency for a specific statement of work or task. Usually developed by a combination of many estimating methods and techniques but developed by the “doing” people. (2) Prepared by in-house government analysts - synonymous with the term detailed estimating, the government prepared engineering estimate normally is done at a functional level of detail with regard to labor with a breakout of major subcontracts and material items also included. It normally is prepared to forecast out-year costs for systems in production or for which prototype production cost data are available.

Engineering Labor: Generally that direct labor expended by engineering employees while performing all scientific investigations, technical process, research, development and design, system engineering, testing, logistics, and support to manufacturing processes for a specific product.

Engineering Or Task Change: An alteration in the physical or functional characteristics of a system, contractual tasks, items delivered, to be delivered, or under development, after establishment of such characteristics.

Enhancement: Improvements to augment the design or physical characteristics of a product or system.

Equipment: Property of a more or less durable nature, which may be expected to have a period of service of a year or more after being put into use without material impairment of its physical condition.

Equivalent Labor (Personnel): The required full-time personnel needed to perform a given task on regular time with normal labor loss such as vacations, sick leave, holidays, leave with-pay, leave-without pay, etc. Equivalent personnel is calculated by dividing the total hours (including overtime) by an equivalent personnel factor for the same time period.

Equivalent Labor (Personnel) Factor: A factor used to convert man-hours into the number of full-time employees required to accomplish a specific task within a given time period with normal labor loss such as vacations, sick leave, holidays, etc., without the use of overtime. Factors differ between years, by geographical location, by company and the government as a result of different holiday schedules and vacation patterns. Also referred to as labor conversion factor.

Established Market Price: A current price, established in the usual and ordinary course of trade between buyers and sellers free to bargain, which can be substantiated from sources independent of the manufacturer or supplier, although the obtaining of such pricing data may have to come from the seller.

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Estimate: A term describing the resources (labor hours, material costs), travel, computer costs, and other costs which are required to accomplish a contract, task, or work item. Also includes the rates and factors, which are applied to the labor and materials to develop estimated costs.

Estimate Scope: The description of the contents of a particular estimate.

Estimated Actuals: The costs reported to a contract during a contractor's accounting year, consisting of (1) The direct labor and material reported in the period as actuals and not subject to revision; and (2) The applicable overhead and G&A as reported to the contract on approved billing rates. The estimated portion of actuals results because these rates cannot be firm until the close of the accounting year and the completion of the government audit and negotiation of allowable charges to overhead and G&A pools. Contract billings are then adjusted upward or downward to reflect the results of the approved overhead charges and rate negotiations.

Estimated Cost At Completion Or Estimate At Completion (EACS): The current estimate of what the final cost will be for the task, whether it be the total contract or just a portion thereof. It consists of actual costs to date plus the estimate of the balance to complete through contract completion.

Estimated Total Price: Total cost plus fee or profit; synonymous with the term price.

Estimating Methodology: A term referring to the approach(s) used in arriving at a cost estimate. Also referred to as estimating methods or estimating approaches. See analogy estimating, engineering estimating, direct estimating, catalog estimating, man loading estimating, and parametric estimating.

Estimating Plan: Introduces structure to the estimating task by describing the scope of the task, responsibilities of the analysis team, and the schedule for accomplishment of the task.

Estimator: A person who performs the estimating function.

Excess Usage: Material in excess of the net bill of material requirements. See surplus material.

Expenditure: Payments made against a particular contract or other obligation.

Experience Factor: A percentage or ratio expression indicating the results of previous actual performance to indicate the output in relation to input. One statistical form presenting an experience factor is the slope of improvement or learning curve.

Expert Opinion: An estimating method of using experts in engineering, manufacturing, procurement, testing, etc. to brainstorm estimates. Usually conducted on a new concept with little or no definition based solely on expert judgment and similar experiences. This term also is referred to as the Delphi approach.

Facilities Contract: A contract under which industrial facilities are provided by the government for use in connection with performance of a separate contract or contracts for all supplies or services.

Facilities: Property (e.g., buildings, structures, improvements, and plant equipment) for production, maintenance, research, development, or test. A term for an organization whose function is to control, administer, and maintain facilities for a company or agency.

Facility Improvement: Construction necessary to replace obsolete facilities or to expand a facility in order to improve operating efficiency of an installation.

Facility: A physical plant, such as real estate and improvements thereto, including buildings and equipment that provides the means for assisting or making easier the performance of a function (e.g., base, arsenal, factory). A part or adjunct of a physical plant or any item of equipment in an operating entity that contributes or can contribute to the execution of a function by providing some specific type of physical assistance (e.g., railroad, railroad rolling stock, vehicles, access road, railroad spur, ship, pier).

Fact-finding: Post submittal phase of a proposal. This phase allows the customer to (1) review proposal support data; (2) investigate certain areas in more depth; (3) conduct audits of rates, factors, and supplier quotations used in the proposal; and (4) conduct on site surveys and reviews of cost information retained at contractors plants.

Factor: A numerical expression of value, or ratio, expressed as a percentage. A factor is used as a multiplier and which, when combined with, or related to other factors, contributes to produce a result. See cost factor.

Factored Items: Labor or material estimated by the application of a factor to a labor base of hours or dollars.

Factory Support To Engineering: See developmental manufacturing.

Failure Rate: The number of failures of an item per unit of measure. The unit of measure may be time, distance, operating hours, etc.

Federal Acquisition Regulations (FAR): The primary regulation for use by federal executive agencies for acquisition of supplies and services with appropriated funds. It directs the program manager in many ways, including contract award procedures, acquisition planning, warranties, and establishing guidelines for competition.

Fee: Represents an agreed-to amount beyond the initial estimate of costs, in specified cost-reimbursement pricing arrangements. In most instances, fee reflects a variety of factors, including risk, and is subject to statutory limitations. Fee may be fixed at the outset of performance, as in a cost-plus fixed-fee arrangement, or may vary within a contractually specified minimum-maximum range during performance, as in a cost-plus-incentive-fee arrangement.

Field Maintenance: Maintenance authorized and performed by designated maintenance activities in direct support of using activities. It normally is limited to replacement of unserviceable parts, subassemblies, or assemblies.

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Field Service Representative: An agent of a manufacturer or commercial concern who provides administration, technical support, or product liaison with a customer or users of the manufacturer's products.

Financial Report: A formal statement, or series of statements, with or without narrative or discussion showing financial condition at a given time or results of transactions or operations for a given period, with or without comparison with budget estimates, standards, past history limitations, etc.

Firmware: A portion of software that has been converted to an actual physical piece of hardware, i.e., a pre-programmed chip.

First Destination Transportation (FDT) Cost: The cost of freight, cart age, and demur rage incurred incident to the shipment of material from a procurement source outside the pop supply system to the first point of use or storage for subsequent distribution.

Fiscal Period: An accounting period of a specified time duration.

Fiscal Policy: (1) Government - The policy pursued in connection with legislation or administrative practices relating to taxation, currency, public appropriations, and expenditures, government funds, and similar matters; particularly the intended effect of such legislation and administrative practices upon the economy of the nation. (2) Commercial - The overall financial operating policy of a company with regard to assets, liabilities, cash flow, expenses, indebtedness, stocks, bonds, etc.

Fiscal Year Buy: The procurement of a specific amount of hardware, software or equipment with the funds provided in a specific fiscal year funding. The actual expenditure period for the procurement may cover several fiscal years.

Fiscal Year: Twelve-month period selected for accounting purposes. (1) Government - The fiscal year for most agencies of the U.S. government begins on the first day of October and ends on the thirtieth day of September of the following calendar year. (2) Contractors - The fiscal year of a company can be any time period encompassing a period of one year.

Fixed Overhead Cost: An item of overhead cost (or the aggregate thereof), which is not considered to vary directly as a result of changes in volume of production; as opposed to variable and semi-variable overhead costs.

Forward Pricing Arrangement (FPA): A written understanding negotiated between a contractor and the government to use certain rates (e.g., labor, indirect, materials, etc.) for a specified period of time in pricing contracts or contract modifications.

Forward Pricing Rates: Rates developed especially for pricing new proposals, additions, or changes to existing contracts with the customer.

Fringe Benefits: The cost of benefits furnished to employees. These benefits include sick leave, holidays, employment taxes, vacations, retirement, group insurance, union pension and state

workman's compensation insurance, etc. Also included are company contributions to employee savings or personnel benefit plans.

Full Funding: The AMS requires that the JRC commit to fully fund all approved programs. This means that the FAA is committed to the funding profile approved in the APB and will, if priorities remain as they currently are, meet the program's funding profile. In other words, a program that is approved by the JRC is considered full funded. However, these funds will be appropriated annually based on the funding profile described in the APB

Full Scale Development (FSD) Phase: The phase in the acquisition life cycle during which the selected system is designed, developed, and tested. To ensure that system performance will fulfill mission requirements, several pre production articles will be manufactured and operated. The system configuration that evolves during full-scale development will reflect closely the article committed to quantity production.

Function: Task-oriented blocks of related effort or people necessary to produce outputs (i.e., engineering, tooling, manufacturing, quality assurance, material, program management, etc.).

Functional Baseline: The initially approved documentation describing a system's or item's functional, interoperability, and interface characteristics, and the verification required to demonstrate the achievement of those characteristics.

Functional Organization (Functional Cost Category): Areas of responsibility, with their own definite description, (i.e., engineering, manufacturing, material, quality control, etc.).

General Accounting Office (GAO): An agency in the legislative branch of the Federal government. Performs independent audit of Government financial transactions to provide a basis for the settlement of accounts and to determine how well the agencies are managing their financial affairs.

General And Administrative (G&A): Indirect expenses, including a company's general and executive offices, the cost of staff services such as legal, accounting, public relations, financial and similar expenses and other general expenses related to the overall business. A generic term used to describe expenses that cannot be assigned directly to overhead areas for engineering, manufacturing, material, etc.

General Overhead Accounts Or Costs: Overhead accounts or costs for labor and non-labor not identifiable to specific contract tasks or specific functional areas (e.g., engineering, manufacturing, material).

General Purpose Equipment: Equipment suitable for a wide range of applications and of a standard off-the-shelf configuration. Usually consisting of catalog type equipment such as oscilloscopes, voltmeters, power supplies, etc.

Glossary of Terms

Government Property Administrator: The individual duly designated by appropriate authority, as an authorized representative of the government contract administrator, to administer the contractual requirements and obligations relative to government property.

Government Property: All property owned by or leased by the government including property acquired by the government under the terms of a contract. Government property includes (1) government-furnished property, which is property in the possession of or otherwise made available to a contractor; and (2) contractor-acquired property, which is property procured or otherwise provided by a contractor for the performance of a contract, title to which is vested in the government.

Government-Furnished Material Or Equipment (GFE): Material or equipment provided by the government to a contractor. GFE can range from in-factory test equipment to base ground equipment to hardware within the flyaway cost of the system.

Ground Rule: A condition directed upon an estimating team that provides the basis upon which an estimate is conducted.

Ground Support Equipment (GSE): Equipment designed to support and maintain primary mission equipment in its use.

Hardware: A generic term used to describe aerospace industry equipment consisting of airplanes, missiles, electronic systems, support equipment, and virtually anything else that is manufactured.

Hardware Cost: Costs concerning the major system equipment items of the work breakdown structure exclusively and can encompass contractor, subcontractor, supplier, and government costs.

Historical Cost (Data): An estimating term used to describe a set of data reflecting actual cost or past experience of a product line. Historical data provides insight into actual costs on similar systems from a variety of contractors to establish generic system costs and also helps to establish cost trends of a specific contractor across a variety of systems. Historical cost data provides the raw material of the entire estimating process.

Homogeneous Data: The term used in describing items of data which are similar or essentially alike and therefore comparable, except in the differences that are measured or investigated.

Idle Capacity: The differences between rated capacity and actual level of operation, usually in terms of percentages.

Idle Time: Lost time of employees or machines due to work stoppage from any cause. Idle time is time that is not productive.

Improvement Curve: A graphical representation of improvement curve theory that is used to project resource requirements (e.g., labor hours, labor dollars, material quantity). When used to

project cost, it normally is referred to as a cost improvement curve. See cost improvement curve theory.

In-Process Work Packages: The work packages that have been started but not completed as of a reporting cutoff date.

In-Service Decision: A corporate decision to accept a product or service for operational use during the Solution Implementation phase of the life cycle acquisition management process. This decision allows deployment activities, such as installing products at each site and certifying them for operational use, to start.

In-Service Management Phase: This phase of the life cycle acquisition management process is that period of time after a product or service begins operational use, and continues for as long as the product or service is in use.

Incentive: A motivational device used in contracts to induce improved performance. It can be based on technical performance, schedule, cost, or award motivation.

Incentive Arrangement: A negotiated arrangement that structures a series of relationships designed to motivate and reward the contractor for superior performance in accordance with the contract specification.

Incentive Earnings: Earnings resulting from awards made under cost, schedule, or technical performance clauses of incentive contracts.

Incremental Cost: Add-on, alternative, accessory, or choice cost. Takes into account the availability of existing resources when adding a new system.

Incremental Funding Concept: A funding policy that dictates that only funds required to accomplish work and provide for related costs in a given fiscal year are included in the budget request for that fiscal year.

Independent Audit: An audit performed by persons not under the administrative jurisdiction of the major entity being audited. Example, (The General Accounting Office performs independent auditing in the Federal government).

Independent Research And Development (IR&D): Company funded, technical effort which is not sponsored by, or required in performance of, a contract, which consists of projects falling within the areas of: (1) basic and applied research; (2) development; and (3) systems and other concept formulation studies. IR&D investigation and experimentation often lead to the discovery of new facts, the revision of accepted scientific or technical conclusions, and the practical application of such new or revised conclusions to new products through studies, evaluation, and development.

Index Number: A ratio of a value of a subject item to the value of a similar type item for purposes of comparison. Usually expressed as a percent. For example, a price index of an item is the ratio of its price at a given time to its price at some other time, usually previously.

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Index: Statistical device for measuring changes in groups of data that serves as a comparative measure, expressed as an index number.

Indirect Cost Pool: A grouping of incurred costs identified with two or more cost objectives but not specifically identified with any final product, program, etc.

Indirect Cost: An item of cost, which is incurred for joint usage, and, therefore, cannot be identified specifically with a single product, service program, function, or project. Usually used synonymously with overhead costs.

Indirect Labor: Labor that cannot be identified to work orders specifically and consistently. Indirect costs are accrued and charged to overhead accounts, the sum of which is applied as burden. The cost of labor that is not applicable directly to a product or service.

Indirect Material: Cost of materials not entering directly into a product. Examples are cleaning fluids, perishable tools, etc.

Industrial Property: As distinguished from government property, means any contractor-acquired or government-furnished property, including materials, special tooling and industrial facilities furnished or acquired in the performance of a contract or subcontract.

Inflation: A rise in the general level of prices. Pure inflation is defined as a rise in the general level of prices unaccompanied by a rise in output (productivity).

Information Other Than Cost or Pricing Data: Any type of information for which certification is not required and that is necessary to determine price reasonableness or cost realism. This includes pricing, sales, or cost information, and cost or pricing data for which certification is determined inapplicable after submission.

Initial Operational Capability (IOC): A term used to signify the operational capability of the first designated unit.

Initial Procurement: The first procurement of an item of fiscal year buy to obtain a specified number of items or system hardware.

Initial Spare Parts: Those spare parts procured through provisioning against a production contract that covers the initial stock age of spares.

Input: (1) Information or variables required by a computer program. (2) Written or verbal data or information requested from a person or functional organization in support of a cost estimating activity.

Inscope Change: Contract change notification from the customer that involves no change in contract cost or fee. Usually called a Class II change.

Inspection (Product): Physical and functional inspection of hardware, the records, and witnessing of test operations to assure that the finished product meets the acceptance requirement of the contract.

Intangible Property: Includes but is not limited to such classes of personal property as patents, patent rights, processes, techniques, inventions, and copyrights.

Integrated Logistics Support (ILS): ILS is the functional discipline that deals with the relationship of supportability requirements to the operational requirements, and their consideration in the design process. The principal elements of ILS are maintenance planning, maintenance support facilities, maintenance staffing, supply support, support and test equipment, training, technical data, and packaging, handling, storage, and transportation.

Integrated Product Development System (IPDS): The implementing arm of the Life Cycle Acquisition Management System, using cross-functional collaborative, empowered, and mutually accountable teams leading teams.

Integrated Product Leadership Team (IPLT): A director-level management team, which oversees the entire IPDS operation. The IPLT resolves high-level, cross-domain issues requiring senior management assistance and support, participates in the establishment and maintenance of IPDS infrastructure, and approves Product Team and Integrated Product Team Plans, focusing on empowerment boundaries and team operations concepts.

Integrated Product Team (IPT): A cross-functional, empowered team with a mission, budget, and other resources for delivering a product or service that meets the needs of its customer or user. The IPT makes binding, team based decisions and ensures the interests of all stakeholders, customers, users, and vendors are represented.

Integrated Program Plan (IPP): The detailed planning document for all aspects of program implementation. It integrates the planning requirements of several previous FAA planning documents including the program master plan, the integrated logistics support plan, the test and evaluation master plan, the program implementation plan, the human factors plan, and the procurement plan.

Integration: (1) The technical and functional activities and interfaces required to accumulate the many facets of a complex system. (2) The overall planning, organizing, and checking process associated with translating RFP costing requirements into a cost proposal. (3) Act of coordinating, summarizing, and documenting the various pieces of a cost estimate. (4) A term often used to describe the effort required for installation of new subsystems in existing systems.

Integration And Assembly (I&A): The term used for the technical and functional activities associated with combining elements into a higher-level element. It includes many of the non-specific efforts such as engineering layouts, testing of components and subsystems, vendor liaison, tooling, and production assembly testing. Generally, I&A activities reside at level 4 of the work breakdown structure for an aircraft system but at Level 3 in most other systems.

Interagency Agreement: A written agreement between the FAA and another Federal agency where (1) the FAA agrees to receive from, or exchange supplies or services with, the other agency and (2) FAA funds are obligated.

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Interchangeability And Replaceability: The capability of replacing any part, subassembly, or assembly without affecting form, fit, function, or degradation to quality or reliability of the basic product or end item.

Interdivisional Effort (Support): Effort performed by one division of a company in support of another division. Usually one division is considered the prime and the other the supporting division. As a course of good business, interdivisional support usually is provided on the basis of a documented agreement of the specific work transactions and costs between a prime and supporting division.

Interdivisional Transfers: (1) Price and Cost - these are materials sold or transferred between prime contractor's divisions, subsidiaries or affiliates that are under a common control. (2) At Price - the quoted price covers a standard catalog price item including profit. (3) At Cost - includes support division cost less profit.

Interested Party: An offeror that has a direct economic interest in the procurement.

Interim Contractor Support (ICS) Costs: The costs associated with support provided by the contractor for an interim period of several years prior to the existence of organic capability.

Intermediate Maintenance: Maintenance performed by centralized maintenance facilities that directly support organizations operating the system. Also known as repair level maintenance.

Intra-agency Agreement: A written agreement between the FAA and Office of the Secretary of Transportation or another Department of Transportation operating administration where the requesting organization agrees to provide or exchange supplies or services with the FAA, and FAA funds are obligated.

Inventory: The amount of property on hand at any given time or the act of inspection to determine the physical existence of property.

Inventory Adjustments: Bookkeeping corrections of stock records required to bring book inventories into agreement with physical inventories.

Investment Analysis: Conducted to determine the most advantageous solution to an approved mission need. It involves development of operational requirements, a market search to determine industry capability, analysis of various alternative approaches for satisfying requirements, and an affordability assessment to determine what the agency can afford.

Investment Analysis Plan (IAP): A plan developed by the Director, Investment Analysis Staff, initiated during the investment analysis phase for each new mission need and approved by the Associate Administrator of the Sponsoring Organization. It provides the necessary policies, guidelines, and procedures for completing the particular investment analysis process in a timely and efficient manner.

Investment Analysis Report (IAR): Summarizes the analytical and quantitative information developed during investment analysis in the search for the best means for satisfying mission need. It is the primary information document supporting the investment decision.

Investment Analysis Staff (IAS): A permanent group in a permanent FAA organization that assists and oversees the work of all the investment analysis teams, is responsible for all investment analyses, and is responsible for developing the tools, techniques, and databases to ensure quality performance of investment analysis on behalf of the JRC. The senior member of the staff is the Director, IAS.

Investment Analysis Team (IAT): An ad hoc team assembled for a relatively short time period for each specific investment analysis (i.e., how best to meet a particular mission need), drawing experts from IPTs, sponsor organizations, the IAS, and other organizations to conduct the detailed analysis of alternatives leading to the selection and recommendation of a preferred acquisition solution.

Invitation For Bids: The solicitation document used in formal advertising for bids.

Job Order: A formal instruction to perform certain work according to specifications, estimates, etc.

Joint Resources Council (JRC): The FAA's body responsible for making corporate level decisions. Membership consists of the Associate Administrators representing all lines of business investment areas of the agency (Air Traffic Services, Regulation and Certification, Airports, Administration, Research and Acquisitions, Commercial Space Transportation, and Civil Aviation Security), the FAA Acquisition Executive, the Director of the Office of Financial Services, and Legal Counsel.

Labor Standards: A set of estimated, measured, or computed values used to forecast and evaluate performance. Examples are rates of machine cutting, assembly time, operations per hours, etc.

Laspeyres Index: A Relative of Weighted Aggregates Index, which uses the original base period weights in the calculation.

Latest Revised Estimate (LRE): See estimate at completion.

Lead Time: The time allowed or required to initiate and develop an item or system so that it will be available and ready for use at a given time.

Letter Contract: A preliminary contract with or without a tentative price or specific amount agreed to and with such other basic terms set forth as can be agreed to at the time. It authorizes the contractor to commence work, incur costs, and make commitments pending negotiation and execution of the final definitive contract. It obligates the customer either to make a final definitive contract within a specific time or to reimburse the contractor for costs incurred under the letter contract. The letter contract is superseded as soon as possible by a final definitive contract.

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Letter Of Intent: An obligation instrument that can be used to initiate a letter contract or protect price and availability of long lead items and for other purposes requiring a commitment to contract.

Level-Of-Effort: Normally refers to a constant number of personnel assigned to a given program for a specified period of time.

Life Cycle Acquisition Management Process: A depiction of the series of phases and decision points that comprise the life cycle of products and services.

Life Cycle Acquisition Management System: A fully coordinated set of policies, processes, and computer-based acquisition tools that guide the acquisition workforce through the life cycle acquisition management process from the determination of mission needs to the procurement and life cycle management of products and services that satisfy those needs.

Life Cycle Cost: The total cost to the FAA of acquiring, operating, maintaining, supporting, and disposing of systems or services over its useful life. Life cycle cost includes total acquisition and operational costs, and includes all appropriations (RE&D, F&E, and OPS).

Limit Of Government Obligation (LOGO): A specified amount of funding for a contract through a specific period of time or fiscal year. The LOGO amount limits the government's obligation to fund a contract.

Limited Overhead: Applied in lieu of full burden to certain activities to allocate to such activities an applicable share of employee service expenses and other general and administrative costs.

Line of Business: An informal term used to characterize the seven major organizations of the FAA, headed by Associate Administrators, having major roles and responsibilities in the Life Cycle Acquisition Management System. They are Air Traffic Services, Regulation and Certification, Airports, Administration, Research and Acquisitions, Commercial Space Transportation, and Civil Aviation Security.

Line-Of-Best-Fit: A line which passes through a charting of data point values in a manner which best represents the trend of the data points. The least squares correlation method is used frequently to compute this line-of-best-fit.

Line Replaceable Unit (LRU): An on-equipment replaced item, which is repaired at a maintenance level higher than that of the flight line.

Logistics: The term given to those activities necessary to plan for and to provide support programs, such as logistics and field engineering, publications, supply support, spares, training, administration of logistics functions, and repair coordination.

Logistics Engineering: The application of support planning and analysis techniques to define, optimize, and integrate the logistics support considerations into the program engineering effort.

Logistics Support Analysis: The task of identifying, defining, and quantifying the logistics support requirements to a program or project.

Long Lead (Item): An item for which the contractor requires authorization and funding prior to program go-ahead, but within the same fiscal year, in order to meet contractual end item delivery schedules.

Lot Quantity: The number of parts, assemblies, or end items released on a given work order.

Machine Hour: Operation equal to that of one machine for one hour.

Machine Tool: Those items of production equipment that are power driven, non portable machines used for cutting, abrading, grinding, shaping, or forming metal.

Maintainability: The measure of the ability of an item to be retained in or restored to specified condition when maintenance is performed by personnel having specified skill levels, using prescribed procedures and resources, at each prescribed level of maintenance and repair.

Maintenance, Corrective: All actions performed, as a result of failure, to restore an item to a specified condition. Corrective maintenance can include localization, isolation, disassembly, interchange, reassembly, alignment, and checkout.

Maintenance Planning: An element of integrated logistics support. It is the process conducted to determine, evolve, and establish maintenance concepts and requirements for the life cycle of a product, including both hardware and software.

Maintenance, Preventive (or Scheduled): Maintenance performed at prescribed points in time for the purpose of maintaining equipment and facilities in satisfactory operating condition by providing for systematic inspection, detection, and correction of incipient failures before they become actual failures.

Major Systems Acquisition: A system acquisition program designated by the Acquisition Executive to be of such importance and priority as to require special management attention.

Make Or Buy: Refers to the determinations by management as to which parts, components, or equipment items will be fabricated (manufactured or made) by the company or obtained from outside sources (purchase or buy).

Man-Hour: A unit of work representing the productive effort of one person in one hour. Also referred to as a labor hour or hour.

Man-Month: A unit of work representing the productive effort of one person in one month. Also referred to as a month of labor or labor month."

Man-Year: A unit of work representing the productive effort of one person in one year. Also referred to as a labor year. The actual number of man-hours in a man-year will vary depending on a specific contractor's allowance for vacation, sick leave, holidays, and other non-productive time.

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Management Reserve: A term limited to contractors that represents a value within the negotiated contract target cost that the contractor has decided not to distribute to his functional departments initially.

Manloading Estimating: An estimating technique that uses a functional manager or estimator to project the number and type of skilled individuals needed to complete a specific work effort.

Manufacturing: Effort and costs expended in the fabrication, assembly, and functional testing of a product or end item. Includes all processes necessary to convert raw material into finished items delivered to a customer's specification. In most companies it is a basic functional cost category.

Manufacturing Labor: Generally, is that direct labor performed directly on the end item or processing of parts used in the finished product and the functional testing of the product. It normally covers fabrication, assembly, and manufacturing support activities. Sometimes includes tooling and quality control labor.

Manufacturing Plan: The narrative and descriptive information to define the schedules, facilities, tooling, fabrication, assembly, test, personnel, and capital items to conduct a manufacturing operation for a program, project, or product.

Manufacturing Spares: Additional components, parts, or subsystems required to support the manufacturing process and to guarantee delivery of the contract quantity.

Manufacturing Technology (Man-Tech): A program that allows development of new or improved manufacturing/maintenance/inspection systems, processes, techniques, or equipment that will allow for a more efficient production process.

Market Place: The commercial world; the realm of business, trade, and economics; the environment in which buyers and sellers bargain to achieve their separate and mutual ends.

Market Survey: Any method used to survey industry to obtain information and comments and to determine competition, capabilities, and estimate costs.

Market Value: The value of anything as computed on the basis of market quotations or in the absence of quotations, the amount that would induce a willing seller to sell and a willing buyer to purchase.

Master Schedule: The master phasing schedule for a program or project with key milestones and critical tasks.

Material: (1) General - raw, crude, partially processed items, or components, which have not yet been brought into a definite functional shape or configuration. (2) Cost element - consisting of raw material, purchased parts and equipment, subcontract items, and outside production items. (3) Operating - covers the components, parts, assemblies, and supplies used in operations and maintenance.

Material Overhead: The overhead cost which is attributable to purchasing, receiving, storing, warehousing, delivering, or expediting materials. Also called “material burden” and “material procurement (indirect) costs.”

Materials & Workmanship: A type of guarantee extended to customers to cover defects in the manufacturing process.

Matrix: A rectangular array of numbers or notations arranged in rows and columns. Each variable appears in both a row and a column.

Mean: An average of a series of quantities or values; specifically, the quotient of their sum divided by the number of items in the series.

Mean-Time-Between-Demands (MTBD): A measure of the system reliability related to demand for logistics support. It is the total number of system life units divided by the total number of item demands on the supply system during a stated period of time.

Mean-Time-Between-Failure (MTBF): A basic (usually contractual) measure of reliability for repairable items. It is the number of life units during which all parts of the item perform within their specified limits, during a particular measurement interval under stated conditions.

Mean-Time-Between-Maintenance-Action (MTBMA): A measure of the system reliability related to demand for maintenance manpower. It is the total number of the system life units divided by the total number of maintenance actions (preventive and corrective) during a stated period of time.

Mean-Time-Between-Removals (MTBR): A measure of the system reliability related to demand for logistics support. It is the total number of system life units divided by the total number of items removed from that system during a stated period of time. The time is defined to exclude removals performed to facilitate other maintenance and removals for product improvement.

Mean-Time-To-Repair (MTTR): A basic measure of maintainability. It is the sum of corrective maintenance times at any specific level of repair, divided by the total number of failures within an item repaired at that level, during a particular interval under stated conditions.

Measures of Central Tendency: A specific measurement (i.e., mean, median, mode) that depicts the tendency for observations to cluster around certain values.

Measures of Dispersion: A specific measurement (e.g., range, standard deviation) that depicts the-tendency for data values to spread.

Median: An average of a series of quantities or values. Specifically, the quantity or value of that item which is so positioned in the series, when arranged in order of numerical quantity or value, that there are an- equal number of items of a greater magnitude and of a lesser magnitude.

Memorandum of Agreement: A written document between two parties, which calls for the exchange of services or goods and outlines the specific responsibilities of each party. It is used to require either party to provide assistance, equipment, or services that will not result in the

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obligation of funds. A memorandum of agreement is not to be executed via an exchange of letters, as is allowed for memorandums of understanding, and is not to be used in lieu of a contract or contract modification.

Memorandum of Understanding: A written document between two parties that establishes policies or procedures of mutual concern, or confirms mutual aid and assistance activities. It is not used to require either party to provide assistance that would result in the obligation of funds. An exchange or letters may be used in lieu of a memorandum of understanding, providing the letters contain all essential elements and conditions, but is not to be used in lieu of a contract or contract modification.

Methodology: A term used in estimating to describe the methods used to develop an estimate (i.e., parametric, analogy, engineering).

Metrics: Measurements of indicators of the status of a project or procurement. Metrics is generally quantitative but can be qualitative.

Midpoint: The calculated mean of cumulative average hours or the unit numbers assigned to the quantity of units that make up a release or production block. In improvement curve theory this is the unit number most representative of the cost per unit for the lot. Normally this is the center unit of the lot, but for first lots the nonlinear effects can require more precise estimation. Cumulative average midpoint is the unit number of the unit at which the cumulative average value would occur. Block average midpoint is the unit number of the unit at which the block average value would occur.

Milestone: A date or event that signifies either the start or completion of a task, work item, or activity.

Milestone Billing: A plan, schedule, or table of billing (request for payment) values associated with key milestones and events.

Mission Analysis: Part of the life cycle acquisition management process during which strong, forward-looking, and continuous analytical activity is performed to evaluate the capability of agency assets to satisfy existing and emerging demands for services. It is conducted within the seven lines of business organizations of the agency.

Mission Need Statement (MNS): A formal planning document that defines a mission capability shortfall or technological opportunity the agency should address. Approval of the mission need statement by the Joint Resources Council at the mission need decision initiates investment analysis to determine the best means for satisfying mission need.

Mission Support Costs: An area of other government costs that includes the miscellaneous administrative costs incurred in the day-to-day operations of a program office.

Mock-Up: A partial or full scale replica of an article or its components, usually constructed of cheaper materials than required in the finished product, and used to provide physical interfaces between structure and various systems such as electronics, hydraulics, pneumatics, electrical, etc.

Mode: The most typical item in a series of quantities or values; that is, the quantity or value of that item which appears most frequently in the series.

Model: A representation of the reality of a situation or condition being studied. Consists of a series of equations, ground rules, assumptions, relationships, constants, and variables, which describe and define the situation or condition being studied.

Modification: Changes to an end item or an item of supply for any stated purpose. It is a change in an airframe, component, or equipment that affects performance, ability to perform intended mission, flight safety, production, or maintenance. It may be a block change to upgrade a system in the field or in ships or aircraft.

Modification Request (MR): Used in source selection to communicate formally to a modification to the RFP requirements by an offeror.

Most Advantageous Solution: That solution that is the most advantageous to the FAA, based on the evaluation of price and other factors specified by the FAA. This approach provides the opportunity for trade-offs between price and other specified factors. It does not require that an award be made either to the offeror submitting the highest rated technical solution, or to the offeror submitting the lowest cost/price, although the ultimate award decision may be to either of these offerors.

Most Probable Cost (MPC): The government's estimate for each competing bidder in a source selection environment. MPC results are used by the source selection authority to determine the winning contractor, and this often becomes the only meaningful measure of the realism of the bidders' cost proposals.

Motion Study: A study of the movements (whether of a part, a machine, or an operator) involved in performing an operation for the purpose of determining the proper movements from the standpoint of maximum economy and minimum operator fatigue.

Moving Average: (1) A continuously revised arithmetic mean of a numerical series of quantities or values for a given period of time, each period being of equal length and expiring at a progressively more advanced date. (2) A forecasting technique used in time series analysis.

Multi-year Contracts: Contracts covering more than one year but not in excess of five years of requirements. Total contract quantities and annual quantities are planned for a particular level and type of funding as displayed in a current five-year development plan. Each program year is budgeted and funded annually and, at the time of award, funds need only to have been appropriated for the first year. The contractor is protected against loss resulting from cancellation by contract provisions, which allows reimbursement of costs included in the cancellation ceiling.

Multi-year Funding: Congressional authorization and appropriation covering more than one fiscal year. The term should not be confused with two-year or three-year funds that cover only one fiscal year's requirement but permit the Executive Branch more than one-year to obligate the funds.

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Multi-Year Procurement: An acquisition strategy that allows authorization of a contractor to purchase materials and parts to support several system buy years, thus achieving savings through economic order quantity procurements.

Negotiation: (1) In its more formal context, negotiation is one of the major methods of procurement. It is employed under certain permissive circumstances prescribed by statute when formal advertising is determined to be unfeasible and impracticable. (2) In its more general context, a bargaining-process between two or more parties, each with its own viewpoints and objectives, seeking to reach a mutually satisfactory agreement on, or settlement of, a matter of common concern. In estimating, the give and take process of final deliberations between a buyer and a seller necessary to finalize a statement of work, program definition, cost estimate and contract for a program or product.

Net Present Value (NPV): The discounted present value of benefits minus the discounted present value of costs. If the results are positive (i.e., benefits minus costs are greater than zero) the project is financially beneficial.

No-year Funding: Congressional funding that does not require obligation in any specific year or years.

Nomenclature: Markings, titles, models, and series numbers used to identify hardware and end items.

Nondevelopmental Item: An item that has been developed previously for use by federal, state, local or a foreign government and no further development is required.

Nonrecurring Costs: Those production costs that generally are incurred on a one time basis and include such costs as plant or equipment relocation, plant rearrangement, special tooling and special test equipment, pre-production engineering, initial spoilage and rework, and specialized workforce training.

Normalized: (1) Database - to render constant or to adjust for known differences. (2) Dollars - various fiscal year costs are inflated/deflated to a common year basis for comparison.

Not-Repairable-This-Station (NRTS): All reported unscheduled maintenance actions, which must be sent to a depot or Special Repair Activity (SRA) for repair.

Not-To-Exceed (NTE) Not-Less-Than (NLT): A corporate commitment to a customer that the value of an estimate plus appropriate contingency allowances will not be exceeded or be less than the firm proposal and estimates which will be submitted at a later date. The NTE or NTL value can be adjusted by changes in the statement of work, requirements, and specifications.

Obligation: The legal reservation of a specific amount of funds associated with a firm contract or other obligating document.

Ogive: Graphic presentation of cumulative hours or costs (or average of period hours or costs) plotted against time. The result is (1) cumulative curve normally “S” shaped; or (2) the average data plotted on a current basis gives the conventional bell-shaped curve, called an “Ogive.”

Operating And Support Costs: The added or variable costs of personnel, materials, facilities, and other items needed for the peacetime operation, maintenance and support of a system during activation, steady state operation, and disposal.

Operating Cost: (1) Total outlay in cash or its equivalent applied in carrying out a specific program or function. (2) A life cycle cost term.

Operational Readiness: Refers to the state of a fielded new system. This state is achieved after the system is tested at the field test site where it is demonstrated that local site personnel have the ability to fully operate and maintain the new system.

Operational Suitability: The capability of a system to be satisfactorily integrated and employed for field use, considering such factors as compatibility, reliability, human performance factors, maintenance and logistics support, safety, and training. The term also refers to the actual degree to which the system satisfies these parameters.

Operations Research: A scientific approach that uses analytic methods to solve operational problems. The objective is to provide management with a logical basis for making sound predictions and decisions.

Optimum: The most efficient/effective use of resources to accomplish a specified task - the best use of time and resource.

Organizational Maintenance: Maintenance performed by the organization that is operating the system. Also known as "base level" and "servicing level."

Other Government Costs (OGC): An aggregated heading of miscellaneous cost elements that typically fall outside of the basic estimate's work breakdown structure.

Out-Of-Scope-Change: A contract change that is considered outside of the contractual statement of work and will result in an adjustment to contract cost and price.

Output: (1) Results of the efforts of B group. (2) Print out of computer tabulation. (3) The energy or work produced by a machine or equipment.

Over Expenditure: Expenditures over (above) the planned or funded levels.

Overhaul: The process of restoring an item of supply to a serviceable condition by completely or partially disassembling the item, inspecting the condition of each of its component parts, repairing, and reassembling it, using serviceable, or new assemblies, subassemblies, and parts as required, followed by inspection and operational tests.

Overhead (Indirect): A cost, which, because of its incurrence for common or joint objectives, is not readily subject to treatment as a direct cost. Such indirect cost is incurred to benefit the total

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direct cost or business base of a contractor. The character of overhead cost thus requires estimating, budgeting and control techniques that take into account the total business base of a contractor. Accordingly, the overhead applicable to any one estimate or contract is by an appropriate distribution of indirect costs through the use of a rate per hour or percentage applied to direct hours or costs. Indirect is a term that is synonymous with overhead.

Overhead Budget: Management allocation of planned indirect costs to each established overhead pool or organization.

Overhead Pool: A grouping of overhead expenses determined to be applicable to a previously determined distribution base, such as manufacturing or engineering direct labor hours.

Overhead Rates: Indirect dollars per hour or cost-to-cost relationships that mathematically reflect the distribution of overhead costs over a labor or cost base.

Overhead Task: Work done by people charged to an overhead account.

Overrun: Costs in excess of the contemplated or target contract costs.

Overtime: Work in excess of 8 hours a day or 40 hours a week. Overtime is a resource that is available to management as a means of extending available manpower and talent, but which imposes a premium labor cost to any task to which it is applied. Consists of two types (1) Unscheduled (Bottleneck) - overtime that is necessary to alleviate a temporary behind schedule condition that can have an adverse effect on other organizations if not completed in time. (2) Scheduled (Planned) - overtime expended on a planned basis to provide round the clock support to an activity that cannot be stopped once started (like countdown to a test firing) or to use machines or technical personnel to the maximum on a task.

Ownership Cost: Another term for operating and support costs.

Paasche Index: A relative of Weighted Aggregates Index, which uses weights computed for the period at which the index is being calculated.

Packing: Application or use of shipping containers and assembling of items or packages together with necessary blocking, bracing or cushioning, weatherproofing, exterior strapping and marking of shipping container.

Packing And Crating Costs: The costs to package the company products for shipment to its customers.

Parameter: A characteristic that is considered to be essential in accurately describing a problem, population, or system. The characteristic is used to calibrate, measure, or calculate a series of results or tests. Various types include design, system, equipment, or cost parameter. In costs, it is often hours/pounds, dollars/horsepower, hours/wire, etc.

Parametric Estimating: An estimating technique, which employs one or more cost estimating relationships. It involves collecting relevant historical data at an aggregated level of detail and relating it to the area to be estimated through the use of mathematical techniques.

Part: An item of supply which when joined together with another item normally is not subject to disassembly without disruption or impairment of the design use of the end item.

Part Standard: A selected and defined item (part) for multiple use that has been developed to best satisfy certain design and performance requirements.

Partial Payment: A payment authorized under a contract upon completion of the delivery of one or more complete units called for in the contract, or upon completion of one or more distinct items of service called for in the contract - the payment of an amount less than the amount due. Also a payment made against a termination claim upon prior approval before final settlement of the total termination claim.

Partial Settlement: A settlement of a serviceable portion of a termination claim or settlement proposal, evidenced by a partial settlement agreement.

Partial Termination: The termination of a portion of the work to be performed or services to be rendered under a contract.

Peculiar Support Equipment (PSE): Unique aerospace ground equipment required to support and maintain a special item of equipment, system, or hardware.

People-Capability Maturity Model: A model, which serves as the framework for the life cycle acquisition workforce learning system. This model, adapted from the Software Engineering Institute's Software Capability Model, is a maturity framework that describes the key elements of managing and developing the human talent of an organization. The model identifies five levels of maturity that an organization must undergo to provide a continuous learning environment. These levels are initial, repeatable, defined, managed, and optimized.

Per Diem: A daily or monthly allowance to cover subsistence, lodging, and local transportation costs while in travel status or temporary additional duty away from one's home location.

Percentage-Time Percentage-Cost (PTPC) Technique: An estimate time phasing technique that illustrates the percentages of total program funds required at various percentages of total program time.

Performance Parameters: Those mission critical performance and life cycle supportability criteria contained in the Requirements Document. They represent the sponsoring organizations' translation of the capability shortfall in the Mission Need Statement into critical factors the selected solution must contain in its eventual operational state to satisfy the user's needs.

Performance Measurement Baseline: The timephased budget plan against which contract performance is measured.

Program Evaluation and Review Technique (PERT): A management tool for defining and integrating what must be done to accomplish program objectives on time, and identifying the critical items and flow.

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Petroleum, Oil, And Lubricants (POL) Costs: An area of other government costs that includes the cost for the petroleum, oil, and lubricants required in the various tests conducted during the development phase of a program as well as those same costs incurred in initial fueling and acceptance tests during production.

Physical Characteristics: Those descriptors of a system, which are primarily physical in nature such as weight, shape, volume, etc.

Physical Inventory: An inventory of property determined by observation and evidenced by a listing of the actual count, weight, measure, or the sighting of classified documents.

Physical Standard: (1) A quantitative, normal measure (not a dollar cost) of a requirement for raw material, labor time, machine time, etc., in a manufacturing or similar process. (2) A basis of production planning, scheduling and control; a means of determination of material, labor, and machine requirements. (3) A means of projecting workloads in relation to capacity. (4) A basis for determining standard costs for use in cost control and preparation of budget estimates.

Plant Equipment: Property of a capital nature (consisting of machinery, equipment, furniture, vehicles, machine tools, accessory and auxiliary items, and other production equipment, but excluding special tooling) used or capable of use in the research, development, manufacture, and test of products or in the performance of services, or for any administrative or general plant purpose.

Plant Property: Capital assets used in the production of goods and services, but excluding materials used up in producing them.

Point Estimate: An estimate, which measures a single numerical value rather than a range of values.

Preliminary Design Review (PDR): Technical reviews held early in a program to view the acceptability of the concept and initial design information.

Premium Pay: Payment in addition to base pay rates to personnel for hazardous duty, off site, non-normal shifts, or overtime.

Preproduction Period: The time between the beginning of work in preparation for production and completion of the first article.

Preservation And Packaging: Application or use of adequate protective measures to prevent deterioration and damage including the use of appropriate protective wrappings, cushioning, interior containers, etc.

Price: Equals cost plus any fee or profit involved in the procurement of a product or service.

Price Index: A ratio indicating the relationship between prices at two time periods. Labor and materials, within designated industry areas, are the two resources usually considered in determining a price index. The cost-of-living index is a form of price index.

Price Negotiation Memorandum: The document that relates the story of the negotiation. The document has two objectives (1) It establishes the reasonableness of the agreement reached with the successful offeror; and (2) It is the permanent record of the decisions the negotiator made in establishing that the price was fair and reasonable.

Price: Price equals cost plus any fee or profit involved in the procurement of a good or service.

Pricing: The establishment of a sales price. The development and justification of sales price proposals including the selection and projection of rates, ratios, factors, and comparative analyses with present or past programs and market evaluations.

Primary Cost Data: Cost data obtained directly from the originator prior to adjustments, normalization, or other types of manipulations.

Probabilistic Relationship: In statistics, a relationship between two or more variables that is uncertain in nature.

Probability Distribution: Also referred to as a frequency distribution, it conveys in tabular or graphical form the possible values or range of values that an element such as cost might assume and the likelihood that each of these values will be realized.

Probability: The numerical expression of the likelihood or chance of occurrence of a given event. The term is often associated with results of repeated random sampling. It usually is expressed as a proportion that is determined by dividing the total number of items, values, or events of a specific type in a given group (or universe) by the grand total of all possible types of items, values, or events in the same group (or universe).

Process Document: Used as an engineering or manufacturing release to describe processing, sequencing and inspection requirements for manufacture or rework of individual parts or assemblies.

Process Specification: A statement of engineering requirements that are supplemental but subordinate to drawings or other specifications, in which are delineated the means of manufacture and the quality assurance evaluation necessary to assure attainment of engineering design.

Procurement: The act of obtaining raw material, purchased parts and equipment, subcontract and other production items or the obtaining of equipment, resources, property, or services by purchasing, renting, leasing, or other means.

Procurement Contract: A legal instrument used to acquire goods and services for the direct benefit or use of the FAA.

Procurement Contracting Officer (PCO): See contracting officer.

Procurement Schedule: Display by fiscal year of quantities of system peculiar major items/components to be procured for a program.

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Procuring Authority: Represents the designated program or project manager, or such other governmental official responsibility for the effective and economical execution of the contract.

Procuring Department: Any department or subdivision that receives, accepts and fulfills orders from another department or subdivision for delivery from stock, manufacture, procurement of material or performance of services.

Product: (1) Any item proposed for sale by a company as a part of their normal marketing or sales function. (2) The service, software, or hardware listed as a deliverable in a contract or purchase order.

Product Assurance: A management discipline which assures that all critical activities are identified; that resources in the form of documented technology, facilities, and qualified people are developed for each activity; and that these resources are applied to each project to achieve customer requirements.

Product Baseline: The initially approved documentation describing all of the necessary functional and physical characteristics of the configuration item and the selected functional and physical characteristics designated for production acceptance testing and tests necessary for support of the configuration item. In addition to this documentation, the product baseline of the configuration item may consist of the actual equipment and software.

Product Configuration Baseline: A description for a contract end item defined by an approved specification and which is established by satisfactory completion of a first article configuration inspection.

Product Cost: The total cost associated with production of a specific quantity of an item.

Product Development: Defined to include all task/project costs incurred in conjunction with the application of scientific or technical knowledge in the development of new products, product components, processes, or improvements. May be developed with a company's own funds, funded by a customer, or combination thereof.

Product Liability Insurance: The purchase of protection against liabilities resulting from product usage.

Product Performance Agreements (PPAS): Contractual agreements that require the contractor to assume a greater responsibility for the field performance of the product.

Product Team (PT): A sub-IPT, with mission, resources, leader, and a complete cross-functional team to execute a sub-element of an IPT's mission.

Production And Deployment Phase: The last phase in a system's acquisition life cycle during which the system, including support and training equipment, data, facilities, and spares, will be produced and deployed for operational use.

Production Break: The time lapse between the completion of a production run and the start of another run for identical units.

Production Cost: Considers the procurement appropriation costs, both contractor and government, associated with the fabrication, assembly, and delivery of a system in the quantities required to support pop objectives. It includes the use able end item, support equipment, training, data, modifications, and spares.

Production Engineering: The application of design and analysis techniques to produce a specified product. Included are the functions of planning, specifying, and coordinating the application of required resources; performing analyses of productivity and production operations, processes, and systems; applying new manufacturing methods, tooling, and equipment; controlling the introduction of engineering changes; and employing cost control techniques.

Production Equipment: Those items of plant equipment located with a manufacturing, processing, assembly, or service establishment and used for cutting, grinding, shaping, forming, drilling, joining, measuring, testing, heating, or treating production materials or work in process.

Production Rate: The maximum number of end items produced in a given time period such as a month or year (i.e., 100 missiles per month).

Productivity: The state of yielding results, benefits, or profits. Productivity rate is a measure of the yielding of result, benefits, or profits; e.g., amount of concrete poured per man-hour.

Profit: Generally characterized as the basic motive of business enterprises; the excess of the revenues from sales of goods to services over the related cost thereof in a given transaction or over a given period of time. The word profit is used in fixed price type contracts versus "fee" in cost type contracts.

Profit Ceiling: The contractual maximum profit usually expressed as a percentage of contract target cost.

Profit Center: The smallest organizationally independent segment of a company which has been charged by management with profit and loss responsibilities and whose operations must, therefore, absorb its indirect costs.

Profit Floor: The contractual minimum profit, usually expressed as a percentage of contract target cost.

Profit Objective: (1) A major goal of a company's sales effort - the difference between sales and cost of sales. (2) In negotiations and procurement, that part of the estimated contract price that the customer and contractor try to negotiate as being appropriate for the procurement at hand.

Program Acquisition Cost: The sum of development and production costs. Construction costs may be included if directly related to the system. Initial spares also are included. Program acquisition cost and program cost often are used interchangeably.

Program Base Year: A fiscal year identified for a specific program that normally represents the year of initial program funding.

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Program Cost Estimate (PCE): A program manager's official estimate of the financial resources required to competently conduct the program contained in the Program Management Directive. The PCE is also referred to as the Program Office Estimate (POE).

Program Decision Making: In general, resource decision making in the life cycle acquisition management process is at the corporate level and program decision making is within IPDS. Four decisions are always made at the corporate level, by the Joint Resources Council, the mission need decision, the investment decision, the decision to approve a baseline change, and a new investment decision related to in-service extension.

Program Work Breakdown Structure (PWBS): The total work breakdown structure for a program containing all the effort needed for a total system. The Contract Work Breakdown Structure (CWBS) is a subset of the PWBS. See contract work breakdown structure.

Progress Payments: Payments made to a contractor as work progresses on procurement, completion of a contract, or an end item. The amounts usually are based upon actual expenditures and work performed at a particular state of completion or a predetermined value based on the completion of certain milestones.

Property Loan Agreement: A written agreement under which the FAA provides and/or receives property on a temporary basis, and Federal funds are not obligated.

Proposal: Solicited or unsolicited offers to provide goods or services. Usually consists of a technical, management, and cost proposal plus a model contract. In addition, a separate executive summary document is included in most major proposals.

Proprietary: Data or documents which contain technical or business information developed and controlled by a company and are critical to the company's sales, product growth, or business operations.

Protest: A written, timely objection submitted by a protester to an FAA SIR or contract award.

Protester: A prospective offeror whose direct economic interest would be affected by the award or failure to award an FAA contract, or an actual offeror with a reasonable chance to receive award of an FAA contract.

Prototype: A largely hand-built original or model of a final product that is subject to full service test.

Provisioning: The process of determining the range and quantity of items (i.e., spares and repair parts, special tools, test equipment and support equipment) required to support and maintain an end item of material for an initial period of service.

Purchase Order: An executed document authorizing a supplier to deliver materials, equipment, or perform services, which, upon acceptance, constitutes the purchase contract.

Purchase Request: A document prepared by a requirements office stating the requirement in quantities and delivery dates for material or services and authorizing the procurement office to proceed with acquisition of the material or services.

Purchased Parts: Consists of standard commercial items fabricated by other than the prime contractor, and parts, components, and assemblies produced by others but not to the prime contractor's designs.

Quality Assurance: That function of management relative to all planning procedures, inspections, examinations, and tests required during procurement, production, receipt, storage, and issue that are necessary to provide the user with an item of the required quality. In current usage often includes quality control functions.

Quality Control: The inspection efforts for manufacturing, shops, receiving and shipping, and records necessary to assure that hardware, end items, parts, components, processes, and tests are being fabricated, assembled, and tested in accordance with engineering drawings and specifications.

Quantity Change: A change in quantity of end items to be procured or produced.

Quantity Discount: The effect measured by a decrease in the cost per unit of an item that results from an increase in quantity produced.

Random Sample: A sample selected in such a way that each element being sampled has an equal chance of being selected.

Range: (1) Statistical - The difference between the extreme values (smallest and largest figure or quantity) in a statistical series/distribution. (2) Estimating - The upper and lower possibilities of the forecasted costs of a program or project. Usually considered to be the realistic possibilities, not the extremes.

Rate: (1) In Estimating - The dollar value (actual or estimated) applied to such things as one hour of labor effort, one unit of computer equipment or machine usage. (2) In Manufacturing - The number (quantity) of items being produced in a given time such as a month or year (i.e., 100 missiles per month).

Ratio: A statistical method of comparing the values of two distinct efforts and projecting the result or quotient of this comparison into future efforts being estimated.

Rationale: A term used to explain the logical basis for an estimate. It may be used to show why an estimating method was selected, and how an estimate was developed. It also may be used to document why specific cost history was used and selected; why a given task, job, or estimate is similar to past experience and history; and why the estimate is realistic and credible.

Raw Index: An index that represents the annual compounded inflation from the midpoint of the base year to the midpoint of another fiscal year.

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Raw Material: Includes raw stock, minor components, sheet stock, wires, etc., that require further processing into manufactured goods or tools.

RE&D Study Contracts: Customer funded research and development activity, which supports and supplements a company's funded new business effort.

Real Property: Lands, building, structures, utility systems, improvements and appurtenances thereto. Includes equipment attached to and made part of buildings and structures (such as heating systems) but not movable equipment (such as plant equipment).

Realism: Source selection criteria used to evaluate the compatibility of costs with proposal scope and effort.

Realization: A ratio of the standard hour value to the actual hours used. It is expressed as a percent reflecting the relative efficiency of workers in performing a given job.

Reasonableness: Source selection criteria used to evaluate the acceptability of the bidder's methodology.

Reconciliation: A determination or statement of the detailed items required to explain (1) the difference between two or more estimates; (2) the reason an actual value exceeds or is less than the forecasted value; or (3) the balances of two or more related values or accounts.

Recurring: Those elements of cost that occur repeatedly during production and delivery of a system. Includes fabrication, assembly, manufacturing, sustaining engineering and planning, sustaining tooling, acceptance testing of production items, and system engineering/program management.

Recurring Costs: Production costs that vary with the quantity being produced, such as labor and materials.

Refurbish: To restore an item of hardware to its original condition, e.g., refurbishing a flight test airplane for delivery.

Regression Analysis: The association of one or more independent variables with a dependent variable. Under static conditions, the analysis is called correlation. When used for predictive purposes, it is referred to as regression.

Rehabilitation Cost: Cost to restore or improve plant, property, or equipment, which is in a deteriorated condition.

Reimbursable Agreement: A written agreement under which the FAA provides material or services to a requesting party, which agrees to pay for those materials or services, and the requesting party obligates funds or promises to provide funds.

Reliability: The duration or probability of failure-free performance under stated conditions. Reliability is quantified as the probability that an item can perform its intended function for a specified interval under stated conditions.

Repair: The restoration or replacement of parts or components of property necessitated by wear or tear, damage, failure of parts or the like in order to restore it to acceptable operating condition without increasing its value or expected service life.

Repair Level: Level at which maintenance is performed on an item - organizational (flight line), intermediate (base), and depot.

Replacement: The act of replacing a unit with the same or a similar unit with a superior or different unit.

Replacement Cost: The cost of replacing an existing item or group of items of tangible property.

Replacement Factor: The estimated percentage of equipment in use that will require replacement during a given period due to wearing out beyond repair.

Replenishment (Recurring) Spare Parts: Those spare parts procured on other than production contracts. These requirements cover support provided after the initial spare parts procurements and extend throughout the program life of the system or end item of equipment.

Request For Proposals (RFP): A solicitation document used in negotiated procurements. It usually contains a description of the items or services to be procured, the terms and conditions, type of contract, schedules, work statement, specifications, listing of the items to be delivered, funding, data requirements, and instruction for the preparation of technical management and cost proposals.

Requirements Document: A formal planning document approved by the Associate Administrator of the sponsoring organization that establishes the operational framework and the cost, schedule, performance, and benefits baselines required by the line of business with the mission need. It translates the mission need into top-level performance, supportability, and benefit requirements that should be satisfied in the final fielded capability. It is prepared in the investment analysis phase of the life cycle acquisition management process.

Research: All effort directed toward (1) increased knowledge of natural phenomena and the environment and (2) the solution of problems in all fields of science. This includes basic research, which has as its goal to increase scientific knowledge rather than its practical application; and applied research, which normally follows basic research and attempts to determine or expand the potential of scientific discoveries or improvements in technology, materials, processes, methods, device, and techniques.

Resources: Consists of facilities, equipment, management, personnel, laboratories, and scientific, technical, and manufacturing capability.

Retrograde Method: An approach used to account for breaks in production that assumes that once production is restarted, learning will proceed down the same cost improvement curve experienced in the earlier production run.

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Revalidated Mission Need Statement: The original mission need statement is approved at the mission need decision. Anytime thereafter in the life cycle acquisition management process, there are occasions when the mission need should be revalidated to ensure the program should continue in the same form. This means that the sponsoring organization reexamines the need and determines that the capability shortfall, impact, benefits, timeframe, criticality, and estimate of resources described in the mission need statement essentially are unchanged. If the parameters are unchanged, the sponsor needs to recommend changes to, or cancellation of, the program in its present form.

Rework: Second time effort to rework and repair, replace components, retouch up, disassemble, and reassemble, etc., once the equipment initially has been built, but is rejected by inspection or test. This is particularly applicable to assembly labor where rejections due to workmanship tend to be random and are not related directly to a particular unit.

Rights In Data: Those rights including title, possession, use or proprietary interest in data, which, although not necessarily patentable or copyrightable, give the holder of such rights a competitive advantage or a special consideration.

Risk: A situation in which the outcome is subject to an uncontrollable random event stemming from a known probability distribution.

Run Time: The hour value that is repeated each time a part is produced.

Safety: The relative freedom from damage or risk of injury to people and damage to items. The organization within a company or agency charged with the responsibility to review work conditions, environment, and products for safety. System safety refers to the safe operation of an end item or system in its operational mode.

Safety Analysis: A logical synopsis of a system or part of a system that identifies its hazards and safety features.

Salvage: Property that is in such worn, damaged, deteriorated, or incomplete condition, or is of such a specialized nature that it has no reasonable prospect for sale or use as a unit, or is not usable as a unit without major repairs or alterations. Includes the amount realizable from disposition of such property.

Sampling: Method of obtaining statistics from a large body of data without resorting to a complete data census. Two broad methods of selecting samples are probability sampling (in which sample units are selected according to the law of chance) and non-probability sampling (in which personal choice, expert judgment, or some other non probabilistic rationale is used to select sample units).

Scaling Factor: The decrease of the measure per physical characteristic (as hours per pound) being compared to similar end items but always increasing in the physical characteristic (as weight). For example, as airplanes of a similar type get larger, the hours per pound get less. The scaling factor is the curve that results from plotting the hours per pound against the various weights of the airplanes.

Schedule: (1) A time-display of the milestone events and activities of a program or project. (2) A subsidiary detailed financial or statistical table, generally in support of summary data in an exhibit.

Schedule Changes: Changes in a delivery schedule, completion date, or intermediate milestone of development or production phases of a project or program.

Schedule Variance (SV): The difference between Budgeted Cost of Work Scheduled (BCWS) and Budgeted Cost of Work Performed (BCWP).

Scrap: Property that has no reasonable prospect of being sold except for the possible re-use of its basic material content.

Screening: The process of evaluating offeror submittals to determine either which offerors/products are qualified to meet a specific type of supply or service, which offerors are most likely to receive award, or which offerors provide the best value to the FAA.

Screening Decision: The narrowing of the number of offerors participating in the source selection process to offerors most likely to receive award.

Screening Information Request (SIR): Any request made by the FAA for documentation, information, or offer for the purpose of screening to determine which offeror provides the best value solution for a particular procurement.

Seasonal Variation: In a time series of statistical data, that part of the movement of the data within each year due to the normal recurring effect of a season or seasons.

Second Destination Transportation: Any transportation other than first destination. It includes port-handling charges and charges for freight, cart age, demur rage, and other charges incurred overseas incident to shipment of property.

Secondary Cost Data: Cost data that has been derived from primary cost data through some sort of adjustments.

Selection Decision: The determination to make an award, by the Source Selection Official (SSO), to the offeror providing the best value to the FAA.

Sensitivity Analysis: Repetition of an analysis with different quantitative values for selected parameters or assumptions for the purpose of comparison with the results of the basic analysis. If a small change in the value of the variable results in a large change in the results, then the results are said to be sensitive to that parameter or assumption.

Sequential Theory: A part of cost improvement curve theory that contends that credit can be taken for cost improvement experienced in prototyping by continuing improvement on the same slope with a displacement on the curve at the first production unit. The first production unit under this theory is defined as the last prototype unit plus one.

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Service-Life Extension Decision: The decision point during the in-service management phase when the costs and benefits of a major upgrade to extend the service life of an existing asset are weighed against the benefits and costs of meeting the mission need through a new replacement system.

Set-Aside For Small Businesses: The reservation of an acquisition exclusively for participation by small businesses.

Settlement Proposal: A termination claim submitted by a contractor or subcontractor.

Setup: The one time only portion of the job of producing a given quantity of identical parts. Setup involves the preparation of a machine for producing parts.

Share Or Sharing: The sharing of “over or under-run” of target costs at a predetermined ratio under an incentive type contract.

Shop Calendar: A company calendar, which shows the working days, holidays, and weekends. The calendar also is numbered sequentially for the working days. The numbers are used for shop releases and manufacturing events.

Shop Replaceable Unit (SRU): An off-equipment replaced item, usually part of an LRU, which can be repaired at a base repair shop (I-level) but usually is repaired at the depot.

Shop Support: A generic term to cover manufacturing support to a program/project activity. Consisting of secondary support services to a primary manufacturing function producing contract end items.

Short Term Rentals: Rental contracts for property or equipment that may be terminated in one year or less are considered short-term rentals.

Shortfalls: Within the mission needs analysis, refers to the difference between the perceived supply and demand.

Should Cost Estimate (SCE): Performed on production contracts. An estimate of contract price, that reflects a level of contractor economy and efficiency that should be achieved. The SCE's purpose is to develop a realistic price objective for the government to use as its negotiation objective. An SCE does not arrive at its value through a build-up process or by using cost estimating techniques. It starts with the contractor's proposal and seeks to decrease the proposed price by investigating the underlying management, engineering, and manufacturing practices to identify inefficiencies. An SCE is performed by a government team composed of procurement (provides team leadership), contract administration, audit, comptroller, and engineering representatives who conduct in-depth analysis at the contractor's plant. The SCE normally is considered to be a procurement responsibility.

Simple Aggregate Price Index: A composite index that is calculated by taking the arithmetic average of a group of simple index numbers.

Simple Aggregates Price Index: A composite index that is calculated by totaling the sum of all the actual prices for a given year and dividing this by the sum of the prices for the base year.

Simple Index: An index that measures the relative change from the base period for a single item.

Simple Time Determined Penalty: An approach used to account for breaks in production that assumes the beneficial effects of production learning are lost in proportion to the duration of the production break.

Simulation: A model of a set of conditions or an environment of interrelated elements exercised in a manner to gain knowledge of conditions they may develop under various circumstances.

Single Service Procurement: Procurement whereby one government department procures certain supplies to satisfy the requirements of all departments.

Sinking Fund: A fund established by periodic contributions for some specific purpose, e.g., retirement of bonds, payment of mortgage, or replacement of an asset.

Site Activation Costs: The costs incurred to bring a site to operational readiness including facility construction, the installation and checkout of all system and supporting equipment, and acceptance of the site by the operating command.

Slippage: Delay in meeting scheduled objectives under a program. Usually accompanied by a related financial impact.

Small Business: A business, including its affiliates, that is owned and operated independently and not dominant in producing or performing the supplies or services being purchased, and one that qualifies as a small business under the federal government's criteria and standard industrial classification size standards.

Software: Having to do with computer programs and instructions. In a general sense - reports, drawings, sketches, computer programs or tapes, photos, etc., as opposed to hardware.

Sole Source: Characterized as the one and only source, regardless of the marketplace, possessing a unique and singularly available performance capability for the purpose of contract award. (Sometimes used interchangeably with the term single source).

Solution Implementation Phase: Phase of the life cycle acquisition management process that begins after the Joint Resources Council (JRC) selects a solution and establishes an acquisition program. It ends when the new capability goes into service. This phase normally is characterized by three sets of activities: planning solution implementation, obtaining the solution, and deploying the solution. This phase is lead by the Integrated Product Team assigned by the JRC at the investment decision.

Source Selection: The formal procurement process used within pop or a company to (1) call for proposals; (2) evaluate proposals; (3) pass recommendations to higher authority; or (4) award the final contract (decision made by the selection authority).

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Source Selection Official (SSO): As a member of the Integrated Product Team, the SSO has full responsibility and authority to select the source(s) for contract award.

Spare: A term sometimes used to denote a portion of spare parts represented by subassemblies and assemblies or major components (like aircraft engines, boosters, etc.); an abbreviated word for spare parts.

Spare Backorders: Spares orders not filled for lack of spares.

Spare Parts: Those items of supply and replacement that are required for the maintenance, overhaul, or repair of a system or associated equipment.

Spare Pipeline: The inventory of spares required to meet an established system availability requirement. The inventory is a function of item reliability, repair cycle time, and the established availability requirement.

Special Test Equipment (STE): All electrical, electronic, hydraulic, pneumatic, mechanical, or other items or assemblies of equipment which are of such a specialized nature that, without modification or alteration, the use of such items or assemblies is limited to testing in the development or production of particular supplies or parts thereof or in the performance of particular services.

Special Tooling (ST): Tools, which are of such a specialized nature that their use is limited to supporting developmental or production manufacturing activities. These tool items are accountable under a contract but not delivered.

Specifications: Federal specifications and industrial trade specifications approved for use by a customer. They include performance, environmental, size, weight, reliability, inspection, safety, health and hygienic, etc. requirements for a deliverable item.

Standard: An established or accepted rule, measure, model, definition, or procedure by which the degree of satisfying a product or act is determined.

Standard Cost: The predetermined cost of each operation or each unit of finished product. It represents the value of direct material, labor, and manufacturing burden, normally required under efficient conditions at normal capacity to process a unit of product. Except for costs attributable to precise and highly predictable operations, actual costs almost always will vary from standard costs due to factors (usually called variances) that affect performance, like employee fatigue, unforeseen interruptions, and other delays.

Standard Deviation: A measure of average dispersion (deviation from the mean) of numbers, computed as the square root of the average of the squares of the differences between the numbers and their arithmetic mean.

Standard Hours: The number of hours a skilled worker should use to complete a given job under ideal or perfect conditions. A standard hour is a means of establishing a relative means of measurement.

Standard Price Variance: Difference between actual costs incurred in connection with acquisition of material and the amount recorded in the inventory accounts at standard unit costs.

Standard Price: A uniform price for any item established by a designated central authority based upon the estimated purchase cost or replacement cost.

Standard Stock Item: An article of the supply system that is approved for procurement, storage, or issue.

Standardization: The practice of acquiring parts, components, subsystems, or systems with common design or functional characteristics to obtain economies in ownership costs.

State Of The Art: The total scientific or technical knowledge available at a point in time when applied to a specific situation or design. It is used as a standard of comparison whereby a design is evaluated in the light of the existing scientific or technical knowledge available at the time.

Statement Of Work: A document stating the confines of the contractual work to be accomplished. The part of an RFP or contract that defines the work which a customer wants performed.

Statistical Cost: Cost derived by the application of statistical methods to data accumulated through a cost reporting and accounting systems.

Statistical Range: The difference between the smallest and largest figure (or quantity) in a statistical series.

Statistical Sample: A limited number of observations selected from a particular area on a systematic, random, or other basis. The sample makes possible, after the application of statistical techniques, a generalization about the area from which the sample was drawn.

Statistics: (1) Descriptive - The collecting, classifying, summarizing, and interpreting of numerical facts and amounts. (2) Inferential - Projection of forecasts based upon sample data.

Status Report: A report reflecting the situation as of a specified date with respect to programs, functions, activities, projects or processes.

Stock: A supply of material maintained on hand or at storage points in a supply system to meet anticipated demands for it. Items issued for actual use are not considered to be in stock.

Stop Work Order: An order from the customer to stop work on a contract. Work may later be resumed or the contract may be terminated.

Storage: The act of storing, or the state of being stored, the keeping or placing of property in a warehouse, shed or open area. Storage is a continuation of the receiving operation and is preliminary to the shipping or issuing operation.

Storage Unit: That part of automatic data processing equipment into which units of information can be copied, stored, and from which the information can be obtained at a later time.

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Subassembly: Two or more parts that form a portion of an assembly or end item.

Subcontract: (1) General - any agreement, purchase order, and/or instrument, other than a prime contract, calling for the performance of work or for the making or furnishing of material required for the performance of one or more prime contracts. (2) Estimating - current usage usually covers the procurement of major components or subsystems which require the subcontractor to do extensive design, development, engineering, and testing to meet a prime contractor's procurement specification.

Subcontracted Items: Parts, components, assemblies, and services produced by a subcontractor for a prime contractor.

Subjective Estimator Judgment: An approach to accounting for uncertainty in which the analyst merely reflects back on the assumptions and judgments that were made during the development of the estimate and then applies a final adjustment to the estimate to reflect this subjective measure of uncertainty.

Subsystem: A subset of devices or individual units of hardware that constitute a defined part of a system (e.g., the avionics of an aircraft system, the fire control mechanisms of a ship system, the transmission/receiving elements of an electronic system).

Sunk Cost: The total of all past expenditures or irrevocably committed funds related to a program/project. Sunk costs are generally not relevant to decision-making as they reflect previous choices rather than current choices. Sometimes referred to as prior year costs.

Supplemental Agreement: A contract modification that is accomplished by the mutual action of the parties. The term is synonymous with contract amendment.

Supplier: A company that supplies relatively standard or off-the-shelf hardware, as contrasted to a subcontractor, who generally performs some degree of specialized engineering in producing his deliverable items. The word supplier is synonymous with vendor.

Supply: As used in the mission needs analysis, a determination of the ability of the FAA to provide products, service, or capacity.

Supply System: The organizations, methods, and techniques used to provide supplies and equipment to authorized users, including identification of requirements, procurement, distribution, maintenance, issue, and salvage of material.

Support Changes: A change in the requirements for a support item (e.g., spare parts, training, ancillary equipment, warranty-provisions, Government-Furnished-Property/Equipment, etc.).

Support Equipment: Includes all equipment required to perform the support function except that which is an integral part of the mission equipment. It does not include any of the equipment required to perform mission operation functions. Support equipment includes handling equipment, test equipment, automatic test equipment (when the automatic test equipment is accomplishing a support function), organizational, field, and depot support equipment, tools, and

related computer programs, and software. Further, it consists of peculiar support equipment (PSE) that is unique to a system and common support equipment that is in the customer inventory.

Surcharge: Any percentage addition to a material price to cover storage, handling, transportation, and other charges.

Surplus Material: Material in excess of requirements in inventory.

Surplus Property: Idle property no longer required by the using or custodial organization.

Surplus Reserve: A reserve representing the amount set aside or appropriated out of surplus for future planned expenditures or unforeseen contingencies.

Survivability: The measure of the degree to which an item will withstand hostile environment and not sustain abortive impairment of its mission.

Sustaining Engineering: The continuing engineering and technical effort that follows the release of all the drawings and specifications and is required to support fabrication, assembly, testing, and delivery of end items. Specific efforts include the maintenance and updating of drawings and specifications; coordination of material or hardware changes; investigation and analysis of problems; and the proposing of the latest available techniques for the prime purpose of product improvement within the scope of a contract.

Sustaining Tooling: The effort following initial tooling for maintenance, repair, modification, and replacement of the tools used in a program and within the scope of a contract.

Sustainment: Those activities associated with keeping fielded products operational and maintained. Also applies to the planning, programming, and budgeting for fielded products, referred to as sustainment funding.

System: The sum total of prime mission equipment and all the peripheral elements that are necessary to operate and maintain the equipment as a mission-ready unit. The system includes support equipment, spares, supplies, trainers, people, tech orders, and facilities.

System Effectiveness: A measure of how well a system achieves the ends or mission objectives.

System Engineering/Operational Analysis Team (SEOAT): A team of senior level managers representing the agency's lines of business, systems engineering, and other appropriate acquisition functional disciplines responsible for supporting the Joint Resources Council in establishing and maintaining year round prioritization of all ongoing acquisition programs, performing affordability assessments for new proposed acquisition programs, preparing annual budget submissions, and preparing reprogramming of funds recommendations.

System Engineering: An engineering organization that allocates and controls the distribution of system level requirements and specifications to lower level subsystems and equipment items. Also controls system level documents such as specifications, weights, reliability, and program equipment lists.

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System Safety: The condition of an assemblage of objects and related personnel, being acceptably free of risk of self-injury or damage, or of injury or damage to other persons or property.

System Safety Engineering: The logical application of scientific methods to the design, development, analysis, testing and use of systems such that the resultant system is acceptably safe.

System Test: Consists of all testing required to develop the system and accomplish planned test objectives, and includes collection of data necessary to evaluate the system. The system test spectrum will be divided into three categories.

Target Cost: A value, established as a result of negotiation within incentive type contracts, used as a cost objective and as a basis for agreement on the target profit and target price. Used as the base point in calculating the cost sharing on incentive contracts.

Task Force: Usually a temporary grouping of personnel formed for the purpose of carrying out a specific mission or project. Sometimes a semi-permanent organization held together for the purpose of carrying out a continuing task.

Task Order: A supplementary contractual and obligating document issued under a master or basic task order contract.

Technical Data: Technical data is an element of integrated logistics support. It is recorded information regardless of form or character (such as manuals, drawings, and operational test procedures) of a scientific or technical nature required to operate and maintain a subsystem/equipment over its life cycle. Computer programs and related software are not technical data; documentation of computer programs and related software are. Also excluded are financial data and other information related to contract administration.

Technical Leveling: The act of helping an offeror to bring its proposal/offer up to the level of other proposals/offers through successive rounds of communication, such as by pointing out weaknesses resulting from the offeror's lack of diligence, competence, or inventiveness in preparing his proposal.

Technical Representative: An employee representing a manufacturer of equipment and assigned to a base installation or customer facility. He provides technical service on equipment manufactured or sold by his company.

Technical Research: That portion of applied research that is oriented toward the engineering disciplines as opposed to a specific product. This effort would include but not necessarily be limited to maintaining cognizance of the state-of-the-art; developing engineering tools, and software; or providing technical solutions to major customer problems.

Technical Specification: Documents intended primarily for use in procurement which are descriptions of the technical requirements for items, materials, or services including the

procedures by which it will be determined that the requirements have been met. Specifications for items and materials also contain preservation, packaging, and marking requirements.

Technical Transfusion: The FAA's disclosure of technical information from one submittal that results in the improvement of another submittal.

Technology Modernization (Tech-Mod) Projects: Efforts that encompass modernization of contractor facilities.

Technology Programs: Those company or customer funded programs that fall within the definition of technical research and customer funded R&D study contracts that are included in a new business program and do not have sale of hardware or services as their end objective.

Telecommunication: Any transmission, emission, or reception of signs, signals, writing, images, and sounds or intelligence of any nature by wire, radio, visual, or other electromagnetic systems.

Terminated Portion Of Contract: That portion of a terminated contract which does not relate either to completed work or material delivered and accepted under the contract, or to any continued portion of the contract.

Termination: A customer-directed cancellation of all or part of a contract. Usually covers two parts. Regular termination covers the short-term aspects of termination consisting of program phase down effort, re-assignment of personnel, final documentation, and initial storage of the contract hardware and data completed up to the termination data. Special termination covers the longer phased aspects of termination such as settlement of subcontractor and supplier claims, continued storage, and disposition of terminated hardware, return of field representatives, and layoff/termination of employees not placed on other programs or projects.

Termination Claim: Any claim or demand by a prime contractor or subcontractor for compensation resulting from termination prior to completion of any contract or subcontract.

Termination for Convenience: The procedure that may apply to any FAA contract, including multi-year contracts. As contrasted with cancellation, termination can be effected at any time during the life of the contract (cancellation is effected between fiscal years) and can be for the total quantity or a partial quantity (whereas cancellation must be for all subsequent fiscal year quantities).

Termination Liability Funding: Obligating sufficient contract funds to cover the contractor's expenditures plus termination liability but not the total cost of the completed end items.

Termination Liability Funding: The funding available to obligate contract funds to cover contractor expenditures plus termination liability, but not the total cost of the completed end items.

Termination Liability: The maximum cost the FAA would incur if a contract is terminated. In the case of a multi-year contract terminated before completion of the current fiscal year's

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deliveries, termination liability would include an amount for both current year termination charges and out year cancellation charges.

Terms and Conditions: The part of a contract or purchase order which covers the general and special provisions, services, delivery dates, contractual incentives, prices, listings of standards, and specifications included in a contract.

Test: The engineering and manufacturing support activities to provide component, subsystem, and system verification by simulated or real operational use of portions or total end items to determine the acceptability of designs and requirements.

Test Check: To verify selected items in an estimate or record for the purpose of arriving at an opinion of the correctness of the entire data.

Test Equipment: Electrical, electronic, or mechanical items used to support the testing process - usually of a configuration such that it can be used on a repetitive basis to support many tests throughout the system test and evaluation process.

Test Run: To exercise portions of a total series of actions or outputs of a component, subsystem, system, computer, or machine to verify correct operation.

Test Spares: Spare parts used in developmental ground and flight-testing.

Then-Year Dollars: Dollars that reflect purchasing power at the time expenditures are actually made. Sometimes referred to as escalated or inflated costs or current costs. Prior costs expressed in then year dollars are the actual amounts paid out in these years. Future costs stated in then year dollars are projected actual amounts to be paid.

Timephasing: The process of allocating costs to specific government fiscal years.

Time Study: Observing, recording, or calculating the time required to perform each detailed element of an industrial operation and leveling off the results into a practicable, attainable work standard.

Time Variance (Labor): The difference between the standard hours priced at the standard rate and the actual hours priced at the standard rate.

Timephased Procurement: The programming and funding of certain non-recurring elements of a production program in a fiscal year different from that in which the useable end item is funded.

Toe-Up And Toe-Down: The upward (toe-up) or downward (toe-down) trend of a cost improvement curve at the end of a production run.

Tool-Up: The point in a production program when the maximum production rate is achieved; the production tools are in place, checked out, and operating at maximum rate.

Tooling: All jigs, dies, fixtures, molds, patterns, special taps, special gauges, other equipment and manufacturing aids, and replacements thereof, acquired or manufactured by a contractor for

use in the performance of a contract. These tools are of such a specialized nature that, without substantial modification or alteration, their use is limited to the production of such supplies or parts; or the performance of such services that are peculiar to the needs of the customer. Sometimes called special tools.

Total Average Labor Cost: Includes all labor hours, productive and nonproductive, averaged over the quantity of units.

Total Contract Price At Completion: Consists of actuals through a specific date plus estimated cost to complete and estimated final fee/profit.

Total Contract Target Cost: The estimated cost set forth in the contract. It is adjusted plus or minus by the negotiated target cost of authorized changes.

Total Obligation Authority (TOA): The amount of funds available for programming in a given year, regardless of the year the funds are appropriated, obligated, or expended. TOA includes new obligation authority, unprogrammed or reprogrammed obligation authority from prior years, and unobligated balances transferred from other appropriations.

Trend: The general tendency of a set of statistical data toward the formulation of a pattern or a line, as related to time or another variable. May be pictured graphically as a curve on a grid chart as opposed to random or no trend data.

Uncertainty Analysis: A systematic analysis of the range of probable costs about a point estimate based on considerations of requirements, cost estimating, and technical uncertainty. The intent of such an analysis is to provide the decision maker with additional information for use in making decisions. Such an analysis is not expected to improve the precision of the point estimate but rather to place it in perspective with respect to various contingencies.

Uncertainty: A situation in which the outcome is subject to an uncontrollable random event stemming from an unknown probability distribution.

Underrun/Overrun: The amount of dollars (plus or minus) that vary from the contract target costs through a given period.

Undistributed Budget: Budget applicable to contract effort, which has not yet been identified to specific CWBS elements.

Unit: Any one part or combination of parts with a specification. Usually used to identify individual end items or major delivered items.

Unliquidated Commitments: Those commitments that are outstanding on the “as of” date of a report.

Unliquidated Obligation: An obligation incurred for which payment has not been made. It may consist of an account payable or obligation for goods and services ordered but not yet received.

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Unsolicited Proposal: A quotation or informal bid. Usually generated within a company and not related to a formal customer request for proposal.

User: Internal FAA user of a product or service, such as Air Traffic Controllers or maintenance technicians.

Validation: In terms of cost models, a process used to determine whether the model selected for a particular estimate is a reliable predictor of costs for the type of system being estimated.

Value Analysis: A systematic and objective evaluation of the function of a product and its related cost. Its purpose is to ensure optimum value. As a pricing tool, it provides insight into the inherent worth of a product.

Value Engineering: An engineering function that examines proposed designs, methods, and processes with the objective of identifying lower cost techniques or processes to produce the item more economically without significant loss of performance.

Variable: A characteristic expressed numerically which might differ from one observation to another.

Variable Cost: A cost that changes with the rate of production of goods or the performance of services. As distinguished from fixed costs (which do not change with the rate of production or performance), and semi-variable costs (which are neither entirely fixed nor variable).

Variance: Deviation or difference between a standard or forecasted value and the actual value; stated in terms of cost, rate, time, weight, height, price, usage, etc.

Vendor: See supplier.

Very Small Business: A business that has been in operation for less than three years and whose size is no greater than 50 percent of the numerical size standard applicable to the standard industrial classification code assigned to a contracting opportunity.

Voucher: Any documentary evidence in support of a transaction. A voucher may be a paid check, a receipted invoice, a written requisition for the withdrawal of raw materials from a storeroom, an authorization to place a new employee on the payroll, or a request for repairs. Frequently, a voucher is viewed as an authorization to disburse money; this concept is not all-inclusive.

Weighted Aggregates Price Index: A composite index that uses the quantity used of an item as weighting applied against the price of that item.

Weighted Average Price Index: A composite index that uses the value of an item as weighting applied against the price relative of that item.

Weighted Average: An arithmetic mean of a numerical series adjusted to give appropriate significance to each item in relation to its importance. For example a weighted average purchase price per unit of a number of purchases of a given item is determined as follows: Sum of the

cost of all purchases (equals cost times quantity of each purchase) divided by total quantity purchased. An unweighted average, or simple arithmetic mean, would be determined by the sum of the unit price of each purchase divided by number of purchases.

Work Authorization: A company instrument, memo, or document that authorizes work to be accomplished on a contract, project, or program.

Work Breakdown Structure (WBS): A method of diagramming the way that work is to be accomplished by separating the work content into individual elements.

Work Breakdown Structure (WBS) Elements: The individual elements of the work breakdown structure representing the required hardware, software, services and/or data. See work breakdown structure.

Work Load: The amount of work in terms of units, tasks, or products which organizations or individuals perform or are responsible for performing.

Work Measurement: A technique employed independently or in conjunction with cost accounting for the collection of data on labor hours and production by work units so that the relationship between work performed and labor hours expended can be calculated.

Work Order: The internal company authorization to incur costs for the design, development, manufacture, purchase, assembly, test, checkout and/or delivery of products. May also cover a specific or blanket authorization to perform certain work. A work order usually is broader in scope than a job order, although work order often is used synonymously with job order.

Work Package: A segment of effort that is characterized by beginning and ending points clearly defined in terms of accomplishment and can be assigned a value of the hours and dollars required to complete. Work packages are lower levels of the contractors extended work breakdown structure divided into functional packages of effort.

Work-In-Process: Materials upon which some manufacturing operations have been performed and on which additional operations are required prior to completion as finished goods.

Working Capital: Excess of current assets over current liabilities.

Wraparound Rate or Wrap Rate: A total rate per hour that covers direct labor, overhead, fringe benefits, and other costs. Also may include factored labor costs, support services, travel, and material costs. Note: no universal definition exists in the estimating profession to cover the specific items to be included in a wraparound rate.